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The Fourth "R"

THE FOURTH "R"

THE FORGOTTEN FACTOR IN EDUCATION

By
HOMER S. BODLEY



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Dedicated to
Service of God,—manifest in
Wisdom, Goodness and Altruism,—
And Humanity.

New occasions teach new duties,
Time makes ancient good uncouth;
They must upward still and onward
Who would keep abreast of Truth.

Lo, before us gleam her camp-fires!
We ourselves must pilgrims be;
Launch our Mayflower and steer boldly
Through the desperate winter sea.

When a deed is done for Freedom,
Through the broad earth's aching breast
Runs a thrill of joy prophetic,
Trembling on from east to west.

For mankind is one in spirit,
And an instinct bears along,
Round the earth's electric circle,
The swift flash of Right or Wrong.

JAMES RUSSELL LOWELL.

PREFACE

IN the month of May, 1920, the author attended a convention at Palo Alto and Stanford University Memorial Church, California.

At this convention it was impressed upon all present that there was a great need of teaching Righteousness to the children in the schools.

This teaching was called the Fourth "R" as distinguished from the three "R's" (Readin', 'Ritin', and 'Rithmetic), representing intellectual culture.

For two days business was neglected and the spirit of the convention grew upon the writer. He was moved by the great injustice to the children by the failure of the schools of our country to teach them the fundamentals of character looking to the best citizenship and the higher ideals of Americanism, so he began immediately to solve the problem.

A resolution was drawn covering the program and was presented to one of our distinguished judges of the State Supreme Court for amendment or change. After looking over the resolution he suggested that it did not need any change. He then recommended that the resolution be sent to one of our leading statesmen for consideration. This was done.

As a result of the correspondence begun at that time many letters of approval were received from leading educators, statesmen, professional and business men scat-

tered throughout the country, and even from South America and India.

The following is the resolution first written:

RESOLUTION

WHEREAS, one of the outstanding lessons of the great war, as observed by keen visioned men and women of the land, is the large need of adding to the intellectual culture and education of our schools and colleges a moral and spiritual atmosphere leading to righteousness with proper conceptions of life, duty and obligation, so that the future electorate of our country may be qualified to perform the functions of government with wisdom and a larger American spirit.

And WHEREAS, there is a general desire on the part of educators to provide the means and common ground by which such education may be given, we would recommend that the government urge the insertion into our text-books, teachings to develop such sentiment consistent with the higher ideals of Americanism.

We would also recommend that the basis of said instruction be the goodness of God with the view that men should honour Him: and that altruism should prevail among men without regard to creed or sect with the purpose of establishing a permanent peace.

Believing that there is need for a treatise on the subject of the "Fourth 'R'" as differentiated from the "Three 'R's'" (Readin', 'Ritin', and 'Rithmetic) which represent intellectual culture, and that the "Fourth 'R,'" Righteousness, or Right Relations, should find a place in our school system, the writer has undertaken to point out some of the higher ideals of life which should be taught without infringing upon any creed or sect.

The ideals and lessons coming under this head are such as would be considered wholesome to men of all

creeds, and, if followed, would certainly form a fiber of character worthy of emulation by men, women and children of all denominations, races and governments.

The higher ideals of Americanism fall under the teachings of "The Fourth 'R'" and should find a place in the lives and character of every American citizen.

Our country has been very neglectful in failing to teach our children these principles, and, as a result, many of the older and adult citizens have grown up without these higher ideals which would promise better citizenship.

Before beginning to write this book, the great need of such work was pointed out by the writer to many leading citizens of the country—practically all conceded the need, and expressed a hope that something might be done to relieve the situation.

Several prominent educators and authors were asked to write a book such as might be acceptable without infringing upon the various sects and creeds. But all appeared to be engaged in other work, with time so occupied in their several spheres of life that they could not be persuaded to undertake the task.

The writer was so impressed with the great need, and feeling that the pupils and students of our schools were suffering a great wrong at the hands of their seniors, he was impelled to undertake the work.

As this book is practically a pioneer in the field, it is hoped that other writers may see their way clear to follow with more elaborate and scientific findings along the lines herein indicated.

By the advice of a leading educator this treatise is framed as a reading book; but so arranged in chapters that it may be taken up for study under the various heads for use as a text-book.

As a further explanation as to the meaning and scope of the "Fourth 'R,'" the writer would point out its province and purpose in the following pages relative to the Declaration of Independence, and the higher ideals of Americanism.

In the Declaration of Independence we have not only a political document—declaring the purposes of the Colonists to separate themselves from the mother country and to establish a new and independent government, but we have a Spiritual Declaration, recognizing Divine Providence, the Altruistic Purposes of Justice, and Democracy, and recognition of equality of men looking to the purpose of establishing the "right to life, liberty and pursuit of happiness," pledging, as it were, each to other to carry out this declaration.

We have then a spiritual law or declaration woven into the political purpose as a background, setting forth the aspirations and objects of the proposed new government. We have here also the nuptials of the two declarations, the spiritual and the political, to carry out the purposes of which the political constitution was framed later: and it appears that the constitution was framed to support and carry out the objects and purpose of the former.

After the political purposes of the Declaration of Independence had been accomplished and the Colonists had acquired their independence, George Washington, as an exponent of the spiritual purposes of the Declaration declared himself as standing upon the platform of Divine Providence (Goodness of God), Justice, and Altruism, when he took the oath of office and placed his hand upon the Scripture passage, Micah sixth chapter, eighth verse, "What doth the Lord require of thee, but to do justly, and to love mercy and walk humbly with thy God."

When Warren G. Harding took the oath of office he placed his hand upon the same Scripture passage.

Abraham Lincoln in many of his notable utterances, in his second inaugural address and in his last public address, voiced the same spiritual aspirations and purposes.

Since Divine Providence and altruistic purpose are recognized by the Declaration of Independence and our great leaders, there can be no doubt or question about the desirability of teaching *the Goodness of God and altruism* in all our schools. In fact it is incumbent upon this generation to fulfill the purpose of the founders of the Republic, to train the children in the aspirations set forth in the Declaration of Independence and the utterances of the fathers of our country. It would appear, therefore, that by failing to give this larger vision to the children in our schools, we have become remiss in our loyalty to the highest obligation and *ideals of Americanism*.

The following pages would point out many of the wonderful manifestations of the purpose, wisdom and Goodness of God in the light of accepted scientific findings relating to His wonderful universe.

When we build our (man's) world exposition we place the lights and arrange their reflections so that we may behold the genius of man. In these pages the author endeavours to lead the reader through God's World Exposition and point out the wonderful works, wisdom and Goodness of God as shown by His lights and their reflections in order that men may grasp the meaning of life in its harmonious relations. These would lead us to contemplate the higher ideals and to cultivate sympathetic relations with God and man. The laws of this

relation embrace the constitution of all righteousness. "Love the Lord, thy God,—and love thy neighbour." On these hang all the laws and the prophets. We hang the laws on the constitution.

The scope and purpose of this book is worked out on the psychology of Hawthorne's "Great Stone Face." As we behold the goodness and wisdom of the Creator and revere His character, we are drawn to the character of our admiration, and function in altruism. So here we find the psychology as well as the constitution of all right relations.

H. S. B.

SAN FRANCISCO, CAL.

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PART I
The Material Universe

I

ASTRONOMY

AMONG the many sciences which show the goodness and wisdom of God as manifest in His creations, relations, adaptations and purpose, the outstanding in prominence is Astronomy.

In the study of the heavenly bodies, the sun, moon, stars, and the functioning of these systems, even with the unaided eye, these marvelous creations amaze us beyond measure. But when we add to the eye the telescope, photography, spectroscope and selenium-cell with their wonderful magnifying power, penetrating into heretofore unknown areas, our admiration is quickened to the point of reverence and awe.

As we view the vast fields of the heavenly bodies, their spheres of action, their power of radiation and the benign purpose served in their movements, we would say with the Hebrew writer: "The heavens declare the glory (goodness) of God and the firmament showeth His handiwork—Day unto day uttereth speech and night unto night showeth knowledge—There is no speech nor language where their voice is not heard."

The outstanding laws operating in the field of Astronomy are the laws of force known as centrifugal and centripetal forces, together with gravitation. These forces hold the earth in its orbit, the planetary systems in their spheres, the sun, moon and stars in elegantly adjusted leash performing their functions in their rela-

tions to one another. These laws, so manifest, are operating with beautiful precision and challenge the wonder and admiration of mankind. By the operation of these laws of gravitation so finely adjusted our bodies, houses and barns are held in place on the earth, yet, at the same time, animal life is free to move and roam according as instinct or volition may direct. This law of mobility operating within the law of force appears to be one of the mysteries of life.

We see here also the fine checks and balances of the celestial sphere operating in such perfect harmony as to keep the world in its revolutions, to bring the seasons in their times, that the copious gift of life (every day a new gift) might continue.

The rising sun every day in its majesty reflects unending beauty and delight. Our emotions are intensified as we watch the light throw back the robe of night, revealing creation in a new garb, every morning exquisitely beautiful.

From the fine laws of gravitation manifested throughout all the celestial creation, we have certain laws of dynamics which are applied and operating under the hand of man. From these laws of force come our pulley and lever from which we have our means of locomotion and transportation in the form of railroad systems, our locomotives, automobile and motor vehicles, our ocean-going vessels, our water systems of travel and our aircraft guided by the hand of man with its great possibilities.

As our planet is an integral part of the solar system, and, according to Newton's theory: "Every body in the universe attracts and is attracted by every other body with a force depending upon their mass, and growing less in exact proportion as the square of the distance be-

tween the bodies grows greater," we must necessarily come under the influence of the other celestial bodies.

So, when we consider the wonderful laws and adjustments by which the earth is held in its orbit and made to revolve on its axis, and the sun held at a distance designed to bring about the seasons suitable for planting, cultivating, harvesting, and a season of rest for recuperation and distribution of crops, we marvel. We wonder also at the benign purpose wrought out and the provision thus made for man's welfare.

We have also the lighting effects of the sun and moon, giving to man the necessary glow of light adapted to his organs of sight, the eyes, all so finely shaded to meet the exigencies of man's needs. The morning sun comes up gradually and kindly lights the world with a glow adapted to the waking eye; then, as all creation responds to the call of light, the glow reaches an intensity of brightness and is prolonged to enable man to plan, calculate, work, and enjoy the fruits of his labour, while the sun still shines. When man with a tired body is ready to lie down for recuperation, and rest seems sweet, the evening glow appears, and the weary body again rests.

But the solar system, and particularly the sun in its majesty, performs another function without which man could not exist. With the coming glow of the morning, borne on the shafts of light, come the heat waves to minister to man's physical needs, and with benign and soft penetration enter into the remotest crevice of the world creation. It causes vegetation to flourish, fruits to ripen, and stimulates man's power of assimilation, propagation and endurance. By the heat thus produced we have not only their direct effects upon the body, but reflections in the great storehouse of coals, oils and heat-

ing processes providing and assisting chemical action to produce the things necessary for man's welfare.

The light carried upon the wings of ether as it travels at the rate of approximately 186,000 miles per second, finds a congenial companion in ether adapted as a vehicle for the conveyance of this wonderful power. In all these relations, adaptations, assimilations, we can see the goodness and wisdom of God in the fine adjustments of all the solar creations to the needs and even anticipated requirements of man.

We might mention innumerable disasters which would certainly happen in case the sun and various planets would fail to function for a day or even an instant. But suffice to say they have never failed.

When the designers of the American flag and the poet verging upon inspiration desired to paint a word picture of the flag, they reached up to the heavens for the beautiful emblems of light, purity and love. They placed the starry cluster, shining amid the broad shield of blue; then, taking the white girdle of the Milky Way, they "striped its pure celestial white with streakings of the morning light." Then, as if possible to add to the beauty of the wonderful concept, they placed the flag in the talons of the king of birds which flies highest and nearest to the heavens, "and gave into his mighty hands the symbol of our chosen land."

One of the practical uses made of Astronomy in the movements and observations of the heavenly bodies is that made by seamen as they steer or pilot their ships from port to port. By compass and nautical instruments these navigators are entitled to tell the time and direction of their ships from any given port; "without chart or compass," as is commonly quoted, depicts one as drifting without power of observation or bearings.

As a suggestion showing the immensity of space, the wonderful power and wisdom of our Great Creator we give below one of the most recent discoveries in the astronomical world, as taken from the Universal Service report from London, August, 1922:

"A new star has been discovered and it has taken ten thousand years for the light of this star to reach the earth! The star is called the Plaskett for the discoverer. According to the best calculation it is 52,560 million million miles from the earth; and an aeroplane traveling at the rate of 200 miles per hour would take 30,000 million years to reach this star.

"In its distance from the earth lies our safety, because, being more than five times larger than any other known heavenly body, and 160 times larger than the sun, the light it emits and the heat it generates would instantly shrivel this earth into ashes if it were in the position occupied by Mars.

"The Plaskett belongs to that class of stars known as the early type—a double star, each revolving around a common center of gravity."

But more recently astronomers revised their figures and dimensions of the universe when they discovered a new cluster of stars and suns far beyond all previous calculations.

This new discovery was not made by telescope alone, as the clusters and systems were far beyond the reach of the most powerful lens. But by the aid of a negative film and photography they revealed and extended the universe two quintillion miles beyond former computations.

These distances are measured by light years or "per-secs," which means the distance which light travels in 365 days at a rate of 186,000 miles per second. It is

said that it would require 165,000 years for the light from these clusters to reach the earth.

The sunlight reaches the earth in approximately eight minutes.

These facts and figures are mentioned merely to show the wonderful power, majesty and benign purpose of the Great Creator.

THE RACE OF THE PLANETS, MARS AND JUPITER

You have probably read of the great Chariot Race as depicted by Lew Wallace in his wonderful word picture in "Ben Hur," and many other races of like character; but you have probably not heard of the Race of the Planets which the writer gathers from a description given by one of our noted astronomers of the wonderful conjunction of Jupiter and Mars in November, 1921.

He describes the historic conjunction as "coming off exactly on time, as predicted four years ago."

"At 2.37 A. M. on November 27th I rushed into the dome room, threw open the door and wheeled the great telescope to a point on a distant peak from which Saturn was to arise. At 3.41 I saw the edge of the ring of Saturn rising amid a clump of leaves of some mountain shrub. Then the mighty globe arose and soon the opposite side appeared. Saturn moved rapidly," and we may say stood forth as a referee for the coming race. "Then the lenses were centered on a far-away peak, where Mars and Jupiter were to arise, and I waited two minutes."

The Race was set and ready to begin. "Then the giant Jupiter came out of a stony crag at 3.06, and in a quarter of a minute Mars arose." The race was on. Jupiter one quarter of a minute ahead of Mars; "then in a jiffy Mars had overtaken Jupiter and passed. The conjunc-

tion of these two great planets predicted four years before had occurred exactly on time. The conjunction and race had passed into history.

"In the telescope I saw giant Jupiter, its four moons, and Mars for the first time. Mars and Jupiter were seen at once, next the thin crescent moon. Then the objectives were set and centered on the rising point of Venus.

"Thus I saw Saturn, Jupiter, Mars, the Moon, Venus and Mercury. Then I went outside and saw the Zodiacal Light; it stood as a cone of pearl. The planets were immersed in its lovely shimmer and sheen."

He called it the "Light Supernal."

"Later in the day I saw nine moons, five of Saturn and four of Jupiter. Then the Sun put on planetary glories and substituted its own, for the remote peaks were painted in crimson and gold. The memorable conjunction and massing of planets was over and soon to be recorded in the rapidly expanding history of Astronomy."

This picture would recall the Vision of the Biblical poet as he pictures the time when the "Morning stars sang together and all the sons of God shouted for joy."

Some astronomers maintain that, by the movements of the heavenly bodies, so accurate is their courses, man is able to predict certain atmospheric conditions upon the earth. Sun spots, eclipses, transit of astronomical bodies across the path of planet or sun, or proximity of comets to certain bodies, may speak of drought, rains, earthquake or unusual electrical disturbances. With instruments for astronomical observations, we may calculate the positions of these bodies at any given time past or present. So helpful and important is this study that astronomers all over the world are scouring the heavens

nightly to observe changes, if any, in their courses, or positions,—if haply they may discern a new body within the field of the telescope. Every discovery of change is immediately heralded throughout the world.

These men of science move from continent to continent at times in anticipation of a chance to observe certain phenomena of the heavens. By the findings of these toilers of the night our horizon is enlarged and the wonders of God's creation are magnified. And when we consider the almost incalculable distances featuring the movements of the heavenly bodies, their orbits, diameters and weights, also their celerity of motion, we must, with uncovered heads, say with the Psalmist: "When I consider thy heavens, the work of thy fingers, the moon and stars which thou hast ordained, what is man that thou art mindful of him, and the Son of man that thou visitest him?"

When the poet Addison, rising on the wings of poetic vision, published the following great concept, nearly two hundred years ago, it aroused much interest in the thoughtful and literary world, causing men to think soberly, and was helpful in stirring up religious fervour.

The spacious firmament on high,
With all the blue ethereal sky,
And spangled heavens, a shining frame,
Their great Original proclaim,
The unwearied sun, from day to day,
Does his Creator's power display,
And publishes to every land
The work of an almighty hand.

Soon as the evening shades prevail,
The moon takes up the wondrous tale,
And nightly, to the listening earth,

Repeats the story of her birth;
While all the stars that round her burn,
And all the planets in their turn,
Confirm the tidings as they roll,
And spreads the truth from pole to pole.

What though in solemn silence all
Move round the dark terrestrial ball?
What though no real voice nor sound
Amid the radiant orbs be found?
In reason's ear they all rejoice,
And utter forth a glorious voice;
Forever singing as they shine,
"The hand that made us is divine."

SOME INTERESTING FACTS

Moon's distance from the earth—240,000 miles.

Sun's distance from the earth—93,000,000 miles—1 astronomical unit.

Distance from the sun to Neptune, the outermost planet—30 astronomical units.

The sun (with all its planets) is traveling through space at the rate of $12\frac{1}{2}$ miles per second. Distance traveled in one year—400 million miles.

The velocity of light—186,300 miles per second. Distance traveled in one year—6 trillion miles (nearly)—1 light year.

The parsec, a term often used in astronomical articles, is 3.26 light years.

Light from the sun reaches the earth in 498 seconds—near $8\frac{1}{2}$ minutes.

Light from Alpha Centauri, the nearest star, reaches the earth in $4\frac{1}{2}$ years.

In other words, this star is 275,000 astronomical units, or 25 trillion miles distant.

The distance to the farthest star whose distance can be measured directly is 326 light years.

This corresponds to a parallax of $0''.01$. That is, the radius of the earth's orbit (93 million miles) as seen from the star subtends an angle of $0''.01$.

This is the angle subtended by a foot rule viewed from a distance of 3,900 miles.

Our stellar system, in the plane of the Milky Way, is believed to be 30,000 or more light years in diameter.

The total number of stars in the entire sky visible to the average unaided eye is between 5,000 and 6,000 (only half the sky is visible to the observer at any one time); the number visible in our most powerful telescopes exceeds 100,000,000.

Our sun is simply an ordinary star not above the average star in size or brilliance; its diameter is about 866,000 miles.

The diameter of Antares, the brightest star in the constellation of the Scorpion, as determined recently at Mt. Wilson by Michelson's interferometer method, is between 280,000,000 and 400,000,000 miles. If the center of this star were placed at the center of our sun, the surface of Antares would extend out beyond the orbit of Mars, our next outlying neighbour in the solar system. Thus the diameter of Antares is considerably more than 300 times the diameter of our sun; its volume is more than thirty million times the volume of our sun. Its distance from us is about 250 light years.—Astronomical Society of the Pacific.

Thomson says: "If our earth had been so clouded that the stars were hidden from man's eye the whole history of our race would have been different—for it was through his leisure-time observation of the stars that man discovered the regularity of the year and got his

fundamental impressions of the order of nature—on which all his science is founded.”

A prominent authority, commenting upon one of the wonders of the universe, says: “In the constellation of the Bull shines fiery red the giant Aldebaran, one of the brightest suns in all the heavens. For nearly an hour and a half our little moon will completely hide the huge sun from sight (in eclipse) although our moon and fifty thousand like it might fall unnoticed on the surface of Aldebaran. If our own earth fell on that star it would melt before reaching the surface, like a snowflake falling on a hot stove.”

How finely and wisely adjusted in the wisdom and goodness of our great Creator are the orbits, distances, weights and laws governing these wonderful creations which by a slight deflection might cause chaos in the whole universe.

TOPICAL SUGGESTIONS:

1. The heavenly bodies; Means of observation; Telescope; Spectroscope; Photography; and “Selenium-cell.”

2. Laws governing the heavenly bodies; Centrifugal, centripetal forces and Gravitation bringing the seasons, sustaining life, resulting in the laws of dynamics, pulley, lever, locomotion, checks and balances.

3. Effects of light and heat; Adjustments of the solar system to the needs and wants of man.

4. The American Flag and symbols. Practical uses of Astronomy.

5. Recent discoveries. Star Plaskett; Race of the Planets. Culmination of a night of observation; Vision of the Biblical poet.

6. The wonderful Astronomical Calculations of those toilers of the night.

7. Addison’s wonderful concept.

8. Facts, as given by the Astronomical Society of the Pacific.

II

GEOLOGY

NEXT to the study of Astronomy, the science of Geology looms up as one of the large subjects to claim our consideration in showing the goodness of God in creation, relations and adaptations to the welfare of mankind.

“In the beginning God created the heavens and the earth.” When and how we may not answer. But “in the beginning God created.” With the advent of man upon the earth, whether through a series of evolutionary movements bringing him to the upright posture as we see him to-day, appreciative of his relation to the Creator and fellow-man, or by one fell stroke of mighty creative genius and master skill, we find him seeking to understand his relation to his Creator and to solve the mysteries of life and environment.

In the science of Geology we have the open book of the creation of the earth, marking the various epochs and long periods of time during which the earth changed on the outward surface from ocean to land and again from land to ocean. These changes are seen in the various strata and formations showing fossils, shells and pre-historic life from which we gather the history of creation, estimating as best we can the various periods through which these changes were wrought.

In the carboniferous period, we have the marks of an age when vegetation flourished most luxuriantly. Then followed submergence of this by the waters and other

formations, followed by an accumulation of deposits with decay and pressure from which we have our coals and oils stored away for man's use when he reaches the plane of intelligence requiring their use. Then, man's need of power and comfort suggests their application to his welfare through the various means of industrial activities. Necessity becomes the mother of invention and inventive genius.

After the carboniferous age and other ages marking the various formations of the body of the earth, we have the Glacial Period and others during which the surface becomes the special object of moulding processes. Mountains are reared by volcanic action and cooling processes of the crust of the earth; valleys are carved out by the erosion of vast glaciers, deposits are made by the glaciers and rivers resulting from melting ice, and the surface is prepared for the habitation of man.

It is not our purpose to discuss the many processes by which and through which the earth passed to reach its present condition. It stands approved as a fit habitation for man; but suffice to say that the Creator has worked out with unerring hand His purposes. He has produced large stretches of fertile land for cultivation to serve man for preservation of life. He has placed the waters of the world in splendid proximity to these lands for irrigation and supplying the needed moisture for cultivation. The glaciers and rivers carried down the sediment, and kindly deposited the alluvial soil for cultivation; and the waters and rivers continue to flow. Where the water does not appear on the surface it may lie underneath only a few feet distant to be tapped by spade or drill.

What a wise provision also we see in the high and often snow-capped mountain as it stands aloft as a living

witness to the wonderful creative genius of God. These high mountains catch the snow and mists of the higher altitudes, which are then clasped in the arms of a cooler strata and congealed into ice for storage until the summer hot winds come to release them for service for man.

The melting snows and ices of the mountains continuously contribute their winter savings to the beautiful valleys below as needed. It may be by direct living stream, or by the subterranean route, or by seepage and percolating flow as the waters find their way into the valleys through springs and soils, providing water for wells and fertility to the mountainsides. The forests of the mountains also play no small part in holding back the mountain waters for summer use, as man may need them.

The metals, coals, oils, limestone, sands and ores of various descriptions are stored away in the mountains or lie deep underneath the surface of the earth waiting for the coming of man's genius to bring them forth for man's use and happiness.

The oceans and seas with their ever-heaving bosoms call to man with fish and food for sustenance. They are also the great storehouses of salt which finds its way to man's table or for commercial use through the many processes of extraction, or through the rock salts of the many mines embedded under ocean or the Gulf of Mexico. This great provision so necessary for man's preservation is so abundantly provided that none need perish. But without it the human family could not exist.

Then when we consider the great provision for man in animal and vegetable life, we again marvel at the goodness of God. However, we shall take this up under another head. The Hebrew writer, exulting under the spell of gratitude, says: "The earth is the Lord's and

the fullness thereof and all they that dwell therein for he hath founded it upon the seas and established it upon the floods."

Whether we study the earth from the standpoint of evolution or consider it from any other view-point, we can see that during the long periods of time while the earth was in process of preparation for man, it furnished life and nourishment for many forms of life, now extinct, which have aided scientists in their calculations and search for knowledge. We see in the museums the great frame of the megalosaurus and other saurian tribes, and in the sand and rocks their footprints. Or it may be that the fossils of prehistoric vegetation and other life, now extinct, may open our eyes to the mind and purpose of the Creator in articulating things which were to things which are now. These marks of time spell an eternity beyond.

In considering the earth in its relation to the atmosphere, we must study the great purpose of the Creator in these relations and ferret out their benign meaning.

As we study the functions of the atmosphere in its relation to the earth, we see that the air serves as a blanket for the preservation of life. As a covering it may be considered a protection from other celestial bodies in their movements as they may throw off their excrescences in form of meteors, also from the many comets which function in the solar system, in the power of the earth in its revolutions on its axis, and the density of the atmosphere to throw off or parry these bodies from their course sufficiently to avoid serious contact.

"It is estimated," says J. Arthur Thomson, "that between ten and one hundred million meteorites enter our atmosphere and are cremated every day. Most of them weigh only an ounce or two and are invisible. Some of

them weigh a ton or more, but even against these large masses the air acts as a kind of torpedo-net. It is clear that 'empty space' is, at least within our solar system, full of these things. They swarm like fishes in the seas. The solitary bit of cosmic rubbish is the meteorite. They generally burst into fragments and fall without doing any damage."

The atmosphere has served also a purpose of fundamental importance in the preparation of the earth as a habitation for man. It blankets the earth against intensity of radiance and heat from without and inequalities of radiance and heat from within.

Water also as second in importance has served in preparation of the earth for life and man. Thompson says, "Water can dissolve a larger variety of substances in solution in a greater concentration than any other liquid. It is a subtle cleaver of substances and forms 80 per cent of living matter."

The earth has also mechanical, chemical and thermal relations to the atmosphere in that through the evaporation of water and absorption by the atmosphere, these chemicals are taken up in solution in the proportions necessary for the needs of man, and the sustaining of life on the earth. The salts of the seas, the carbonates from the land surface, the various gases and materials which go to make up the necessary ingredients for the preservation of life, both in vegetable and animal creation, are thus furnished. These are, in turn, again precipitated according to the requirements and needs of man and vegetable life.

The winds of the atmosphere also play a beneficent and benign purpose in the distribution of the ever-changing chemical combinations to the places most needful. They clarify the atmosphere, lend aid to sultry, hot

climates by the cooling breezes, hold in suspension the dusts, and rains to fall, not suddenly as a precipitate blanket but in a gentle, genial manner congenial to man's needs. The cold and hot strata of atmosphere, as they alternate upon the surface, cause the rocks to crumble, thus producing soil. With these changing temperatures and the chemical changes in the atmosphere, we see the rocks of the mountains crumble and finally washed down into the valleys to become fertile soils for cultivation.

Even the electrical disturbances in form of lightning serve a benign purpose as they rend the rocks, blast as it were, to loosen up soils or quicken vegetation in its growth.

Water, waves and currents are changed by the action of the atmosphere and the winds as they play upon the ocean and sea.

Vegetable life is quickened and plant life distributed by the fertilization caused by the carrying of pollens and seed by the wind.

So, in the science of Geology, the benign purpose of the Creator is seen and is working out the highest good for mankind.

They say that God lives very high
But if you look above the pines
You cannot see our God; and why?

And if you dig down in the mines,
You never see Him in the gold,
Though from Him all that's glory shines.

God is so Good, He wears a fold
Of heaven and earth across His face,
Like secrets kept for love untold.

But still I feel that His embrace
Slides down by thrills through all things made;
Through sight and sound of every place. “ ”

ELIZABETH BARRETT BROWNING.

TOPICAL SUGGESTIONS:

1. The creation of the earth; Geology the open book of the creation.
2. Various periods through which the earth has passed.
3. The earth stand approved as a fit habitation of man. The wise provision made in land, mountains, valleys and rivers and general water supply for man.
4. The metals, coals, limestones and sands.
5. The oceans, seas, and food supply, storehouse of salts needful for man.
6. The atmosphere, a blanket for preservation of life. The density of atmosphere with the revolution of the earth deflects comets, and practically consumes meteors. The mechanical, chemical and thermal relations of the atmosphere.
7. The winds of the atmosphere, changing temperatures, causing changes of climatic conditions. Assist in fertilization of vegetation.
8. Water waves and currents.
9. Poem by Elizabeth Barrett Browning.

III

BOTANY AND AGRICULTURE

HAVING noted in the previous chapters on Astronomy and Geology the wise provision of God in preparing the earth for habitation of man, we must next consider His Providence in the plans for sustaining life on the earth.

Under the head of Botany and Agriculture we may discern the goodness and wisdom of God in His far-reaching provision as shown by the laws governing under these sciences.

Under the laws of Astronomy we saw the great provision made in establishing the sun in the solar system with its abounding heat and light, varying in intensity and glow to suit the various conditions under which crops may be sown, cultivated, matured and harvested, as well as providing a season of rest both for the earth to recover potential energy during the season of inactivity, and for man to properly distribute the crops, fertilize and provide for the following season of activity, or crop year.

Having provided heat and the genial atmosphere with humidity and buoyancy for carrying the moisture in the form of clouds to be poured out in rains at the opportune time, as the various seasons may demand, He, through His goodness and wisdom, made the seed with power inherent to absorb from the earth, air and water the necessary particles, and to appropriate them both for building a larger and different body, and to reproduce itself *ad infinitum*.

But man must have food, and food must be produced from the seed; and the seed must necessarily find the ingredients for their development with the necessary surplus for reproduction.

So we look at the structure of the seed; we analyze every particle and note the wise provision in its composition, structure and inherent qualities necessary for preservation and propagation. We find the germ element laid far down in the secluded and well protected parts and away from the ravages of insect and weather. Also with an outer crust or shell, then with an inner fiber or covering, as a rule of a glutinous, spongy or firmer substance within which the germ is embedded. Note the kernel of the peach, almond or acorn.

Having noted the life germ, we see a wonderful power inherent, as above suggested, to assimilate from the elements nourishment to produce a stalwart tree (for example) with numberless branches and fruits for many years, besides reproducing itself most copiously.

As the fruit is useless without the power of assimilation and desire on the part of man or beast for the fruit, and with facilities of body, such as hands and feet, to appropriate same, so we see in man these reciprocal requirements.

Through the tissues and structure of the body power is also inherent to produce another body altogether different from the one appropriated. In all these assimilations and appropriations the mind of man to a large degree is brought to function as guide and monitor, aside from the involuntary action of the parts involved.

Thus we see the goodness and wisdom of God in building up from the lower to the higher until the crowning glory of His creations is found in the mind and soul of

man with power to apprehend God and come into communion and sympathy with Him.

The calix, corolla, stamen and pistil of the blossom carry with them their peculiar function to protect, propagate and stimulate. The stamen with pollen and odour to attract the bee lie loosely for the wind to waft the pollen to another blossom for purposes of fertilization. The calix, strong in its position, stands as a support to the blossom, and the corolla as an outer guard to serve as protection to the seed and stamen, while the pistil with firm stalk, as it were, holds at its base and far down under cover the seed, and within the seed we see the germ life well hidden and protected from insect and weather as before suggested.

The seed of animal life is also protected and hedged about by divine purpose for propagation and preservation, but it is not necessary to extend the discussion at this time.

As we find in the mountains and mines limitless provision for man, so in the forests we see a wise provision for lumber for all building purposes. Our houses, furniture and vessels are thus provided, and with the hand of man in co-operation with Divine Providence, we have in the trees of the forest a wonderful source of supply of material needful to man's shelter, warmth and equipment for house furnishings.

In the vegetable kingdom we see a manifestation of the goodness of God in the many kinds of vegetables good for food provided in their seasons and suited to serve man's needs. The potato with its variety figures probably more largely than any other in its use for food and sustenance of man. It is easily propagated, cultivated by the simplest methods and by an unskilled farmer. The Irish potato is probably the most generally used, and

is a common food with ingredients such as starch and other chemicals necessary for sustaining life. It is said that in 1848-49 potatoes were the sole food of the Irish peasantry. The sweet potato is remembered by the writer as one of the choice tubers of boyhood days—when the sweets were put on the table the boyish eyes danced with glee and mouth watered at the happy anticipation of a dinner of saccharine flavour.

The beet, turnip, carrot, and many other of this large family contribute to the welfare of man in the season in which they mature; also in the great appeal to man's appetite as he craves the nourishing products of farm and garden.

The watermelon and cantaloup are among the many relishes of the early and mid-summer months, when refreshing juices or waters of same slake the thirst and satisfy the palate. Then the berries come in their season and mark a happy period in the life of all. And you will note that many of these vines have guards to prevent the birds and insects from molesting; yet man, with care, finds easy access to them.

When the vegetables have about run their course, our all-wise Provider then brings on the nuts and fruits needed; as it were, courses to suit the appetite, in the season.

The corns with strong exterior fiber, with grains lying close together and nestling, embedded within the strong cob, almost say to man: "Here we are ready for immediate action or to wait as reserve for the winter season." The life germ of the grain of corn is extremely persistent in its power of propagation. It is said that a grain of corn buried and hid away with the mummies in the time of Rameses, when placed in the soil germinated and produced.

There is also a marked manifestation of the goodness of God in the wise provision of the fruits in their seasons to nourish man and beast.

As in the case of vegetables, we see that they ripen at a season to suit the needs of man, and that their maturing runs concurrent with man's desire, so we may look at the fruits of the garden and farm and note how the fruits of the various trees mature with appeal suited in season to man's need and appetite.

Among the first to claim our attention is the beautifully coloured cherry with its dark hues of red and its lighter shades of yellow and orange. It ripens early, at a time when man needs with his diet the acid juices for cleansing the internal organs which the cherry apparently furnishes. Such also runs concurrent with the early vegetables.

Then, in order, come the peach, apricot and early apples, running along in season with the early melons and berries.

Then, later, come the prunes, quinces and early oranges, and running along with these, we find the corns, sweet potatoes, larger beets and sugar canes, all ripening in the later season when man begins to think of the winter, for which season of rest or inaction man must lay by the products of nature's bounties suitable for storing.

The nuts and the more hardy fruits ripen at this season. The leaves and fruits put on their bright and gaudy colours and with appeal almost audible reveal their beauty and call to man's wisdom and appetite.

The squirrel and chipmunk begin to lay up for their winter rations and to provide for winter's blast and snow.

The cooling winds of the autumn and the peculiar

beauty of the leaves, together with the shorter days, appear to awake us to nature's call to provide for the days of coming rest. These are winter's harbingers of approaching change.

The wheat, corns and nuts peculiarly panoplied to meet the conditions of winter storing may be carried into barns or whisked away to parts far distant, as demand may appear.

In season structure and form we see the wise provision thus made in nature, and the goodness of God is manifest.

The lettuce and early vegetables are not constructed suitable for the later season and for storing away for winter's use. The nuts, corn, wheats and later apples are not made to ripen in the spring too long before the season for storing.

Thus, in the science of Botany, we see the benign purpose of our Creator providing for every need of mankind.

Light has a wonderful influence upon plant life as well as upon animal life. The plant sends out its shoots which bend toward the light. And the leaves spread out and twist around to catch the rays of the sun. Thomson says that "Light interferes with the action of gravity on the stem and is the primary cause of leaf movement. The leaf is formed wide and flat as a rule, with exposure of surface to the light as large as possible and in colour (green) and in place to absorb or drink in the carbon dioxide, the nourishing food of the plant, from the air." Vegetable life is the great transformer and prepares the foods for animal life.

The leaves, the lungs of the plant, are unable to withstand the frosts of winter, but the seed containing the life germ is built and protected even when dried up so that

its vital activities are reduced to a minimum and with its closely protected coat can resist the coldest temperature of the winter. It can withstand heat also, and its life is preserved through decades.

Thomson says: "One of the factors that assisted the Allies in overcoming the food crisis in the darkest period of the war was the virtue of Marquis wheat, a very prolific early ripening, hard red spring wheat with excellent milling and baking qualities. It has enormously increased the real wealth of the world in the last ten years. In 1918 upwards of 300,000,000 bushels were raised in North America, yet the whole originated from a single grain planted in an experimental plot at Ottawa by Dr. Charles E. Saunders in 1903."

TOPICAL SUGGESTIONS:

1. The laws of astronomy and geology prepare the soil and furnish water supply with fertilization processes for man's sustenance through vegetation.
2. The seed with power inherent to absorb from earth, air and water the necessary particles or chemicals for food supply and reproduction. The structure of the seed. The wonderful provision made for preservation.
3. The fruit useless without power of man to handle, assimilate, and appropriate the fruit.
4. The building processes from the lower to the higher forms of life until man, the crowning glory of creation, is reached.
5. The functions of the blossom and its various parts.
6. The mountain, mines and forest contributing limitless provisions for man.
7. Vegetables and fruits in their seasons.
8. Form and structure to suit the needs of man.

IV

CHEMISTRY

HAVING seen from previous chapters the wise provision made for man in the solar system, the preparation of the earth for man and the many safeguards thrown around animal life and vegetation and the seed for preservation, also His wisdom and goodness in providing moisture in form of rains and heat from the sun, we must look further into the great storehouse and see what lies within the scope of Chemistry.

Having provided man with soil, moisture and seed, we look about for means for producing food for man's preservation. We see that he needs a helper in the form of tools for cultivation, also for transportation and communication.

In the laws of Chemistry we see the merging and combination of ingredients and material changing form and structure. The iron ore is changed from the rough, apparently useless piece of rock to the bright and glistening piece of steel. The sand is changed by a combination of chemicals and heat to the clear or many coloured glasses.

From the rock charged with silver, gold and other precious metals by the application of the laws of Chemistry, we break up the rough combination, and in place of the seemingly worthless piece of stone we have the many metals for use as our purposes may require.

Having secured the iron and steel from the ores, we proceed to shape them into tools, implements and machinery. We form the products of same by a process

of rolling, moulding and cutting under a high degree of heat, and we have our plows for turning over the soil, our harrows for breaking up the clods, our machinery for planting, cultivating and reaping the crops.

Also from the laws of chemistry and physics, affinities, expansion, contraction and expulsion, we have our railroads built of steel, our locomotives and cars for transportation, our automobiles and motor vehicles for industrial, commercial and social enjoyment.

We have our telegraph and telephone systems for communication, our great merchant vessels for transportation over ocean and sea.

In the moving-picture world the film bows obeisance to the laws of Chemistry, and we have the delights and educational processes growing out of this wonderful addition to man's life.

The artist and the great producers of art would throw a halo around the brow of Chemistry, were a personification produced. The painter mixes paints and colours to produce the Madonnas. Michael Angelo, Rembrandt and other great artists could never have brought to life, so to speak, their wonderful productions without the use of these laws.

The food we eat, the water we drink, the clothes we wear, the air we breathe, the wonderful functioning of the physical mind and body crowd in, around and under these great laws. The power of assimilation of foods, the preparation of same by salivas, juices, and chemical processes besides the strength and power of reproduction, all bow their homage to the king of chemistry.

In the congealed waters or ices and the liquid air, under the laws of Chemistry, we see a transformation in the forms almost miraculous, although in the case

water to ice and ice to water the transformation is most common.

But here in the use of ices we see a great contribution to the welfare of mankind. The sufferers from fever and kindred diseases amid the blazing suns of the tropics, or in the summer heats of other zones, pay their tribute to the cooling draught or application of ices, as they toss upon their beds appealing for relief.

The surgeon, as he applies his scalpel to the suffering and broken patient, can better perform the operations demanded when using the processes of anesthetics to the parts affected and under their calming influences.

The preservation of foods, meats and vegetables follows upon the application of ices and salts, as these foods remain long in transit or in storage.

The many colours, pleasing to the eye, the beautiful harmonies in dress, house colouring effects, landscape scenes and spectral combinations in nature, all call for praises of these wonderful laws. The diamond, amethyst, emerald, onyx, or even the beautiful pearl, whose architect builds twixt heavy walls in deep ocean or shallow waters, all with one accord speak the great Creator's wonderful provision in the laws of Chemistry.

The white marbles of Vermont, the dark slabs of Tennessee, the black coals and oils of the mines and wells, if they could speak, would unravel a tale of wondrous history, pictured amid the fires, frosts, and combination of chemical action, bringing them to a place fit for humanity's use.

In the fertilization of the soils by the common combinations of carbon dioxides and water, humus and bacteria, we have a contribution to the welfare of man which adds largely to his wealth and common comforts, making the earth to produce more bountifully and to blossom

forth as the rose, where, formerly, only weeds might grow.

The newspaper, the phonograph record, the telescope and microscope, the thermometer and barometer, all exult in their praise of Chemistry.

So, whether in the air, ocean, earth, animal and vegetable life, or, as we may say, in all the elements we see the great Creator's provision through the laws of Chemistry for all and every need, where man may work in harmonious action and common accord with His evident purpose working out the *summum bonum* for mankind.

The commerce of the world may be carried upon the bosom of the ocean, the whirl of wheels in factory amid the din and mutterings of machinery, the transportation of products from one end of the earth to another, the growing and groaning of vegetable life as it presses its way through the soil and grasps from earth, air and water, the combination of chemicals for growth, reproduction and fruits; all these may cause our admiration and wonder, but we can never arrive at a full appreciation of these marvelous creations and their functioning until we begin to study the Hand which guides and stabilizes the harmonious whole.

As one poet says:

"Till all the world take up the strain,
And send the echo back again,
Consider nature's God."

But aside from the general laws of Chemistry as mentioned above, we must consider what may be called the fundamentals of creation.

The ancients thought the earth was supported on a gigantic elephant, and the elephant on the back of a monstrous tortoise, and as J. Arthur Thomson says in his

"Outline of Science," "If every animal in nature had been called upon, they would have been no nearer a foundation." They left it as a whole floating in nothing; however, they were wiser than they knew when they left it floating in space. "Things do not fall down unless they are pulled down by that mysterious force which we call gravitation. The earth, it is true, is pulled down by the sun and would fall into it, but the earth escapes this fiery fate by circulation at a great speed around the sun. The stars pull each other but they meet this by travelling rapidly in gigantic orbits. Yet we do, in a new sense of the word, need foundations of the universe. Our mind craves for some explanation of the matter out of which the universe is made." For this explanation we turn to modern Physics and Chemistry. "These sciences treating energy and matter have put together a conception of the fundamental nature of things."

Through the study of the electron, atom, molecule and the relations of matter to energy and force scientists have developed the telescope, spectroscope and the selenium-cell which gives us access through these wonderful instruments to a field of research and knowledge which otherwise would be closed to our vision. In astronomical observations our power of vision and resultant findings have been multiplied thousands of times through the use of the laws of matter and chemistry. In the field of the microscope we are almost astounded as we behold the wonders of nature, their laws and movements as developed through the science of Chemistry.

In the fields of botany and agriculture, in the relations of plant life, growth, fertilization and general developments the laws of Chemistry have multiplied our harvest, increased our production and enriched the flavour and quality of the fruits of the orchard and farm.

In medical research and healing processes these laws and findings are practically invaluable.

And when we come to consideration of the "solids," though they are not solids in the stricter sense of the term, we find these laws operating with like precision and wonderful accuracy.

By the use of the microscope and chemical appliances we see that the solid is not a solid in structure in the popular sense of the word. Thomson says, "If you put a piece of solid gold in a little pool of mercury the gold will take in the mercury between its molecules, as if it were porous like a sponge. The hardest solid is more like a lattice work than what we usually mean by solid. If we could see right into the heart of a bit of the hardest steel we would see billions of separate molecules, at some distance from each other, all moving rapidly to and fro. Under the powerful microscope with appliances, the world of solids is found to be the wonder world of atoms and molecules—of course the molecule and atom cannot be seen but their movements can be revealed."

"All articles of food and clothing and the materials of which our houses and buildings are constructed and which are needed for their decorations and repair, every art and every industry all depend essentially for their production or activity upon chemical changes as realized in nature or made by man to serve human purposes. The same is true of the production and decay of animal and vegetable matter, as also the process by which they are broken up and the resulting products made available in their turn as food for new life. These chemical changes constitute a sort of adaptation of matter to environment, and in a sense are acts of creation, as every such change produces products which, although related, are quite distinct in character and in properties from the original

substances which give rise to them when subjected to the required influences. Thus, in a very literal sense, all matter which, as will be seen in other places, appears to be essentially one in nature, is actuated by a spirit of life, being susceptible to change when the environment is appropriate."—KNIGZETT.

"The continuance of civilization, the upkeep of the human and animal population of the globe, and even the supply of oxygen to the air we breathe depend on the silent laboratories of the green leaves, which are able with the help of the sunlight to use carbonic acid, water and salts to build up the bread of life."—THOMSON.

"There are within the human body certain glands such as the thyroid and suprarenal which manufacture subtle chemicals which are distributed throughout the body by the blood. These chemical messengers influence in regulating the vital processes. They stimulate organs and tissues to greater activity and are called hormones. There are other chemical messengers which put on the brakes, so to speak. These are called chalons. And others regulate growth and alter the pressure and composition of the blood; others call into activity parts of the body which have been waiting the signal." Certain energies come into action in youth which have lain dormant during childhood. These changes are produced through the chemical messengers above mentioned.

In all these changes nothing is lost, as Thomson says, "If a bar of iron is heated it becomes longer, but it returns to its original length when cooled." The iron remains iron from first to last, so with oxygen and hydrogen. H_2O may be in the form of water, ice, cloud, and vapour as steam, and associated with many other chemicals, to suit mankind. And these may be separated and serve man in the gaseous state, hydrogen, the lightest element,

lifting the Zeppelin or for heating purposes, and oxygen for sustaining life.

“Apart from radium and other sensational discoveries of recent years the study of ordinary matter is hardly inferior, in interest or audacity to the work of the astronomer.

“A single grain of indigo will color a ton of water, which shows that billions of molecules spread throughout the water.

“A grain of musk will scent a room yet not lose one millionth of its mass in a year.”

With the discovery of X-rays and radium the wonder of the electron and the applications of these findings have been immensely valued by mankind. As Thomson says, “With the X-ray we could photograph the skeleton of the living man’s body, locate a penny in the interior of a child or take an impression of a coin through a slab of stone.” The discovery of radium by Madam Curie was a starting point of the new development of physics and chemistry. Then came the discovery of the electron. This discovery of electrons pushed forward the science of chemistry into a much broader field and effected a revolution of ideas. It became the key to many things hitherto a mystery. It gave a better and larger view of the nature and activities of matter, and Thomson says, “We have now a complete proof of the independence of atoms and also electrons.” Sir William Bragg says, “I am of the opinion that atom-energy will supply all our future needs.” Thomson says, “Half a brick contains as much energy as a small coal field.”

But why dwell on these wonders of nature? Our answer is that through the wonderful findings of man we approach nearer and nearer the benign purpose of

the great Creator who is evidently pushing man on and on to the goal of an infinitely larger life.

As another illustration of the wonderful works of Chemistry we would cite the products of coal. From this we obtain gas, tar, coke, ammonia, naphtha, creosote, anthracene oil, naphthalene and solvent naphtha. When coal-tar was first used for making gas, the by-products were considered troublesome. The residue consists of coke and coal-tar. The story of coal-tar products is very wonderful, but suffice to say that it is a storehouse of dyes, drugs, explosives and perfumes. It is one of the most useful substances in all the world.

From coal-tar come ten primary products, and these have yielded hundreds of intermediates, such as aniline. And from these thousands of dyes of all shades and hues have come. The story of the products of coal-tar would fill a large sized volume.

The story of India-rubber or caoutchouc obtained from plant life is also very extraordinary. And when we consider chemical conjurings in extracting sugars from plants, cellulose and starch from plant life, and the importance of these ingredients in animal life, we marvel.

Inconceivably large as are some dimensions in the astronomical world, it is nevertheless true that our knowledge of them and of everything else in the visible universe is transmitted to us wholly by light-waves arising from the very rapid motions of the inconceivably small particles or electric charges, called electrons, that form essential parts of the atoms or molecules of which all matter is composed, and made known through chemistry and photography.

Distances expressed in hundreds and thousands of light-years are measured through the effects produced by light whose waves are so short that there are about 50,000

to the linear inch. In addition to the visible radiations, the atoms emit the much shorter waves corresponding to X-rays and also longer ones called heat waves. Electric waves are of similar nature, but are caused by the oscillations of electric charges in bodies larger than atoms. All these waves travel with the same velocity, 186,300 miles per second.

The unit employed in measuring light-waves is the angstrom, whose length is one ten-millionth of a millimeter (0.000,000,004 inch). The instruments and methods are so accurate that results correct to less than a hundredth of an angstrom are obtained.

"The hydrogen atom is probably composed of a very small positively charged nucleus around which an electron circulates at a relatively great distance. The diameter of this orbit, or the diameter of the atom, is less than one hundred-millionth of an inch— $1/100,000,000$ inch. The diameter of the nucleus is of the order of one-two-thousand-billionth of an inch— $1/2,000,000,000,000$ inch. The diameter of the electron is about one five-thousand-billionth of an inch— $1/5,000,000,000,000$ inch. In a cubic inch of air there are about 43 billion billion molecules—43,000,000,000,000,000,000."—ASTRONOMICAL SOCIETY OF THE PACIFIC.

As we change the form of substances by the application of the laws of chemistry and note the phenomena of these transformations we marvel at the wonderful energy manifested. We see that the substance changes only in form: but not a particle is destroyed. This fact brings to our notice the wonderful economy of nature, or the law of the conservation of energy. The energy stored up in our coal fields and oil deposits is constantly being transmitted into life's activities through manufacturing and industrial lines, evolving and changing mat-

ter without dissipation into every conceivable form in life's contacts.

When we observe the wonderful gifts showered upon humanity by these laws and consider the benign purpose back of them, we can better appreciate the spirit of the Psalmist when he exclaims, "Oh, that men would praise the Lord for his goodness and his wonderful works to the children of men."

TOPICAL SUGGESTIONS:

1. Our great Creator having prepared the earth and the seed with rains and heat now supplies the tools through laws of Chemistry.

2. Application of Chemistry to various rocks and ores extract the metals needful for tools and machinery, planting, cultivation and harvesting. Railroads, telegraph and telephone systems, vehicles for commercial use.

3. The film, products of art, the paints we use, clothes we wear, and food products, all pay obeisance to the laws of chemistry.

4. These laws in surgery. Preservation of foods.

5. The marbles, coals, oils and mines and wells, their wondrous history.

6. Fertilization, adding wealth to the nations through chemistry.

7. The newspaper, phonograph record, telescope, microscope, and photography—The wheels of commerce.

8. Discoveries of X-Rays, radium, movements of molecules, atoms and electrons.

PART II
The Physical and Mental Life

V

THE PALACE WE LIVE IN

(THE FIVE SENSES)

AMONG the many marvelous creations marking the goodness of God we must consider the human body or movable house with which we are so intimately associated. It may be called the acme of His creative genius.

Within this palace we find all the passions, joys, loves, aspirations and hopes of life mingled with all the appeals of His abounding creations, now to the finer and nobler impulses, then to the more sordid and lower instincts, all surging as it were as the waves of the sea, but finally calming down to the quiet equilibrium of peace.

Man is made more noble for the storms through which he passes and better prepared for the higher and larger duties of life. The buffeting may leave marks as the scars of the sculptor's chisel, but each blow brings out more clearly the finer fiber and perfect form.

This Palace is featured by movable foundations with self-sustaining automatic appliances for building, while at the same time it tears down the waste of life and with censors so keenly and finely adjusted that only the mind of creative genius would dare to proclaim it "mine."

When we look at the fine adaptations, the powers of assimilation, the gathering up of the particles making for health and happiness, and clearly discriminating them from the waste and refuse of the Palace, we marvel. Then when we further discern the keenness of instinct

and the lightning rapidity of action, the positive exactness with which the various organs function, each assisting the other and working with such elegant precision in all movements, we again wonder.

What fine adaptations found in the eye, ear, touch, taste and smell, with their sensations abounding in delights and utilities—*ad infinitum*—not only for enjoyment, but as censors and preservers of life. At the same time, the mind, with its wonderful mechanism and perception, hovers over and directs the activities of the Palace. In this wonderful power of mind we see it functioning with distinct features.

We have inquisitiveness sending out feelers as detectives to search out the minutest detail in their quest for knowledge and fact.

We have also the feature acquisitiveness and retention as memory which husbands and stores away all the facts and findings of the search.

Then the faculty of aspiration which exercises imagination and penetration, reaching out in prospect and vision even to the Infinite.

Then with all these fine functions we see a splendid adaptation and relation as manifest in the family life. The father is formed, strong, fleet of foot, compact of body, built to contend with the elements and to bring in food for the family. The wife and mother formed to meet the conditions of motherhood, to nourish and care for the helpless child. The child, utterly dependent upon the father and mother, finds affection of the family immediately developed to meet the new conditions of life. The family is cemented by love's bands to suit the new and various relationships.

Having considered in a general way the Palace we live in, we come to look more closely at certain specific

parts to see how they show the wisdom and goodness of God.

These outstanding features are commonly called "The Five Senses"—Touch, Sight, Hearing, Taste, and Smell, are the outstanding in life's conceptions.

The feelings may cover in a general way the whole nervous system, including the sensations of all the other senses, but specifically the system by which we recognize pain, pleasure, and all those sensations which act upon the whole body. These measure the approach of danger from without, such as cold, heat, and immediate contact causing either pain or pleasure, also dangers from within which may be noted by suffering of special organs of the body, marked by pain, languid or debilitated condition.

The senses may be likened to censors to warn the King within the Palace of specific dangers and with warnings almost audible to guard the parts involved. Automatically and involuntarily nature lends first aid to all injured parts in way of rush of blood to coagulate and repair the wound. Then the whole palace is astir, providing ways and means to heal the damaged parts. Hands, feet, eyes, ears and even smelling are brought into play in these activities and movements.

After the general sense of Touch, we have the sense of Sight, the one employed most incessantly in guarding the Palace in its movements during our waking hours to avoid contact in the changing positions, in its relation to other bodies which might endanger the whole or part. It is just as careful to protect the other senses as to provide for its own safety or the safety of the whole body.

Besides functioning as a censor, it also provides means by which treatment of the various parts may be secured. It leads the way to the physician, helps him in

preparing his remedies, watches the clock to note the times for applications, and notes change of conditions.

Having done all this in providing help for the Palace, the Eye, in its relations and activities, provides so much pleasure to the body that the whole Palace moves with eagerness to comply with every suggestion. The tourist will scale the highest Alps to view the picturesque beauties which nature provides among the mountains of Switzerland. They will endure the burning sands of the desert and the ices of the arctics to view the wonders of nature and creation. They will gladly challenge the uncertainties of the ocean, storms and raging seas to gain a glimpse of the Orient or Occident.

The dress of the various nations, with their many coloured garb, is an unending delight to tourists in their quest for change and beauty.

In commercial, industrial and social relations the Eye provides the great essential for utilities and pleasure. The moving picture, the evening dress, the pictures of the home, in fact all the beauties of nature, make appeal to the eye and come under the dominion of the sense of sight.

Next in order we may consider the sense of Hearing manifesting our Great Creator's care.

Much of life is bound up in the pleasures resulting from this sense. Music, one of the abounding delights and helps in all social, patriotic and religious gatherings, supplies man with exhilarations lifting him at times to ecstatic vision.

Among the utilities of this sense we find a large function in industrial, commercial and social life. In industrial environment it may be among the swiftly moving machinery of the factory or mill. Here, tons of white-hot iron in form of ingots or rails may be pushed and

hauled among the workmen in uncovered torso, where the hum and buzz of the wheels and cogs give warning of their unrelenting activities. They almost sing as they revel in their motions, now crunching and now pressing between their iron jaws tons of red-hot steel which seethes, writhes, twists, and then, as the saltpetre is thrown in, comes the explosion. As if shot, the serpent-like form lies conquered as a fallen foe. To appreciate these movements so lifelike, yet so unrelenting, one must have the complete power of all the senses. A failure to hear a whistle or note a sign might cause an explosion, spelling complete destruction of the mill or whole process.

Among the many delights and pleasures of life are found, in nature's provision for pleasure, the singing of the birds, the roar of the waterfall as it leaps and roars over the great Niagara, or the precipices of Yosemite, or the geysers of Yellowstone as they reach their white arms towards the clouds, amid the many coloured shales which speak of glacier, fire and waters past. Or we may hear the pounding of the waves of the Pacific as they break against the rocks as sentinels off the coast of California, all these mark a part of life's joys to those who are born with the wanderlust spirit, or are trained in the art of travel.

The music of the ages in songs of religious or patriotic fervour can only be appreciated by the functioning of this sense and training the ear to the harmonies of music; or in social life as we refer to Shakespeare's *Romeo and Juliet*, and note the inspiration added to song by lyre; and in martial air, the added zest of patriotic fervour begotten by the National Anthem or as the boys sang "Over There"; or in religious worship as the inspiration gathers in fervour as the soloist or the

congregation reaches the appealing tones and notes, adding visions and glimpses like unto Jacob's ladder reaching up to heaven.

We next take up the sense of Taste as showing the wisdom and goodness of God.

This sense, especially useful and filling a large place in the happiness of mankind, is furnished, as it were, with a body-guard in order that its functionings may be keener and its censorship more complete. The little white guards in the way of teeth are ready to challenge every intruder and require him to be searched or dissected as if fearing lest a particle should trespass without giving the countersign or being washed in the salivas of purification before admission to the Palace or holy place.

Besides the little white guards, the sense of Taste is assisted by the sense of Smell, which would require the candidate to give its age and render account of its associations before being admitted to the sacred precincts of friendly relations. So intense is the exhilaration resulting from the exercise of this sense of taste that men delight in associating it with special hours of enjoyment. At a supper or dinner served with seasonable viands or delicious condiments, men are more susceptible to social influences under the spell of this sense. Often the grumpy and grouchy will throw off their feeling leaning to the blue or ultra violet and move up to the warmer and more cheerful side of the spectrum close to the red or orange shades of good fellowship.

The eye, as well as the sense of smell, lies close to this sense in many of its relations. The luscious and beautifully coloured fruits, with their appeal to the eye, bring to the vestibule of the palate secretions or saliva suggesting desire to revel in refreshing juices. It may

be the peach, plum or melon, or any one of the many other tempting fruits which figure so largely in the history of the race, with appeals most compelling. Adam said, "The woman thou gavest me gave me to eat." This sense, commonly called Appetite, may also be educated to a point of intensity with appeal so potent that the man so affected must employ the highest faculties of his being, reason and will, to control this sense.

But the wisdom of a wise Providence is again manifested in giving man this reserve force to protect and guard him against over-indulgence.

The appetite has played a large part in the history of the race according to Biblical account. In whatever way we may consider the scene in the Garden, we note that the great appeals were first to the senses, then to the mind which takes up the findings of the senses, weighs, wishes and wills. The combination of appeals to desire appeared to break down the barriers of restriction and opened the door of self-indulgence, which always leads to violation of law.

Again in the history of mankind we see the appeal and push of the appetite urging man to violate the laws of heritage and tradition when Esau, worn and hungry, came in from the hunt and saw the tempting pottage which his brother Jacob had prepared. The appeal of appetite was so great that Esau, in his weak and unappreciative mood, bartered his birthright for the mess of pottage, turning as it were the future channel of the race from the weakness of self-indulgence personified in Esau to the higher and more spiritual life personified by Jacob in self-control. The racial accomplishments of Esau's line never approximated to the wonderful reaches of power and progress which followed the line of Jacob.

When the tests came to the Great Teacher, one was

also along this line. When hungry and weary the appeal was made to appetite.

“Grant that these stones shall be made bread.”

From these references we see the moral lessons: Self-indulgence leads to violation of law and moral weakness; self-control leads to progress, prosperity and higher spiritual life. The former to be avoided as the appetite for alcoholic beverages which leads to disease and vice; the latter, self-control, leads to progress, health and happiness.

The sense of smell is next to be considered as manifesting the goodness of God.

This sense finds a large place among the activities of man in assisting the other senses in censoring foods and viands, contributing to life's joys and happiness. It also is one of prime importance in detecting odours, gases and fumes which are injurious and pernicious in their effects upon the Palace we live in.

Smoke or fumes arising from smouldering fires or the combustion causing loss of life and property are often sensed by smell in time to prevent a spread of flame by notice to the other senses to awake to the dangers imminent. The house, theatre, church, hospital or asylum may be threatened by smouldering fire when this life-like censor, with keen appreciation of danger, calls the whole Palace to arouse all hands to action with every ounce of energy brought into play in combating the encroaching flames. Unnumbered lives and property beyond computation have been saved by the faithfulness of this little sentinel. Its activities penetrate garret, cellar and dome, hospital ward and laboratory, and the chancel of church to ferret out the origin of danger.

The church or theatre full of people, the asylum or hospital with suffering soldiers and orphans caught with-

out other warning finds first aid and a friendly helper as it scents danger afar off. It penetrates not only the odours and fumes of combustions, but goes under hill and mountain with the miner and throws around him the cloak of protection from poisonous and noxious gases which infest the mines. This sense of smell also penetrates the sewer and carrion spots where dangerous gases threaten the lives of men and families. The dog, ferret and vulture often lead the way of man in the quest for hunted objects, as these can more readily run down their prey or objects of food.

As we study the senses in their relation to each other, we must note the great purpose served in their combination and association together as they co-operate in their activities.

The Biblical writer says: "The eye cannot say to the hand I have no need of thee, nor again the head to the feet I have no need of you," but all the various parts are built together forming a compact whole.

So we have team work exemplified in the functions of all the senses. We see their great accomplishments in athletics, industrial, social and political life in the splendid co-operation of all the parts involved.

Betts says: "A more complete study of sensation reveals nearly three times this number. The body is equipped with more than a dozen different kinds of end-organs, each prepared to receive its own particular kind of stimulus." However, we cannot enter into a detail discussion at this time.

The palace fine, the Rex so keen,
The conscience all combined,
Place man upon a pedestal
With genius, power, enshrined.

This frame so grand with muscles firm,
 Foundations ever moving,
 Articulations, ducts and oils,
 And lubrication showing.

Each joint and socket in its place,
 They challenge wisdom's lotion,
 And show the structure, bones, and flesh,
 A mansion, house in motion.

TOPICAL SUGGESTIONS:

1. The human body is a movable house. A palace with automatic appliances for building and tearing down the waste,
2. The fine adaptations, powers of assimilation, and rapid movements of all the parts.
3. The mind actions featured by inquisitiveness, acquisitiveness, aspirations, retention and memory.
4. The family adaptations.
5. The senses as censors. Touch, sight, hearing, taste, and smell; and functions of each.
6. Touch covers the whole nervous system, including the sensations of all the other senses.
7. The senses guard the palace in its movements; provides many delights as well as utilities.
8. The senses show team work and co-operation in all their functions.

VI

PHYSIOLOGY

IN a measure we have treated some phases of Physiology in the chapter on the senses, but we can look further into the subject and inquire more in detail as to the manifestations of the goodness of God as we study the harmonious articulations, the assimilations, the purposes and placements of the various parts of the human body.

In building a house we see that the foundations are substantial and of strong and firm material. We note the general contour including form, frame, placement of the parts to accord with the purposes of their functions, and we finally look for the figure to have a pleasing effect upon the eye.

As we look over the human frame and diagnose the various parts and the functions each is expected to serve, we marvel at the fine adaptations of the various organs to the rôle they are to play in life's drama.

The movable foundations are constructed with bone and sinewy muscles, with articulations at the various joints adapted to the elastic and quick rapid movements of the whole frame; the feet, toes, knees and ankles are suited and lubricated by nature's wise provision through involuntary and automatic ducts working continuously to provide the necessary oils for all purposes and eventualities. The toes are not where the heel is required, in position to receive the heavy weight of the whole frame to which it is adapted and in place best suited. The ankles, knees

and all joints are supplied with articular cartilage as a cushion to receive and break the shocks of every movement. And the heavy cushion of the heels, together with the joints, serve to support the frame in a soft muscular socket. The whole, from the nail, serving as protection to the toe, to the knee-cap furnishing a shield to the joint, all work together in a harmonious combination to serve locomotion and rapid movement of the body.

Then as we move to the other larger parts and note the hip joints and large bones which serve to steady the body, to support the heavy automatic machinery of the digestive system, the generative, pneumatic and circulatory systems, we marvel. And as we see the complexity yet the harmonious movement as each part functions as if guided by a subconscious mind to perform the special task, we again wonder.

We note the spinal column with its numerous vertebrae, each articulated and united in a manner to serve not only as a support to the cranial system, but as a protection to the nervous system incased within, all working in accord with the great and evident purpose of serving the whole human mechanism in a manner most marvelous.

If we would go further and consider the nervous system, the circulatory, pneumatic and generative systems and their relations to each other, we shall find an outstanding expression of God's goodness.

The nerves report constantly their findings as they stand sentinel over the whole body, giving warning of impending danger or giving expressions of pleasure in a clear field of joy.

The circulatory system, including the great power house or pump which we call the heart, ever faithful day and night, automatically unceasing in its fine functioning of driving the blood to every portion of the body, purifying,

injecting the rich red flow into the remotest crevices of the physical man and at the same time carrying off the waste particles to their place.

The pneumatic system as it pulsates, inhales and exhales the oxygen of the air, placing it within reach of the circulatory system to purify the blood as it flows through and at the same time throws off the carbon dioxide, the waste and rejected parts.

Then the digestive system as it functions in throwing into the circulatory system the health giving particles assimilated from the food and casting aside the refuse or ashes, ever working and unceasing in its movements to promote the highest and best for man.

The generative system, with parts hidden far away in the recesses of the bodily mechanism, protected by the heavy hip bones and large abdominal muscles as if nature would make sure that reproduction could not fail.

Then we note the cranial system in which might be included the various senses as they function in their relation to the other outstanding systems of the human organism. What a wonderful combination of powers and systems within this part called the head or cranium. The brain, the seat of the mind, the systems of hearing, taste, smell and sight, are all centered here within this small compass. Yet it is the seat of the directive energy for the whole body. Then again we note how these wonderful systems are protected by the heavy skull bone as if nature would again assure itself that these powers would not evaporate or lose their functioning in the great plan of the Creator.

As man has sounded the praises of the glories and goodness of God as he has beheld the heavenly bodies in their movements, so a pæan of joy and admiration might be sung when one considers the harmonies, beauties

and utilities of God's creative genius manifested in the wonderful system and combination of systems in the physical man endowed with powers of thought and speech akin to the Divine. We marvel at the wonderful provision for his life and destiny.

The dermis and epidermis (inner skin and outer skin) including the marvelous system of pores to throw off the waste of the body in perspiration and exhalations for ventilation and purification; also the wonderful system of nerves standing as living sentinels to guard against dangers, and the whole as a waterproof covering for protection. Besides it is said by physicians that in the hotter climates of Africa and southern India there is deposited between the inner and outer skins a coloring matter which tends to protect the body against the hotter and more direct rays of the sun, but causing the peoples of these countries to become a color of darker hue. Thus we have the various colored races and people of various climes.

The hair with its many cells and roots has its function not only in protection of the head but may serve for warmth and a general stimulation or strengthening of the body. The eyebrows to serve as protection of the eyes from perspiration; the eyelids and eyelashes for protection of the eyes, and even the tonsils, which once were considered of no special use, are now recognized as having a function which tends to purify the blood flowing through them.

The whole man, consisting of body, mind and spirit, is a most marvelous combination of systems co-ordinating, co-operating and functioning to work out the highest good for man. In this we can certainly see that all parts work together for good as these respond to natural instincts, subconscious or directive mind, and as they come

under control of the higher powers of the complete man with conscience clear and purpose pure.

One of the great industrial managers of our country and an outstanding engineer, musing and writing upon the mechanism and functions of the human body, which is termed "The Miracle of Miracles," writes a pen picture in these words: "We engineers are apt to forget that the human body is the most wonderful work of engineering in the world. As a plant it is more complex than the largest works in existence. Take the digestive tract, the lymphatic system, framework of bones, the innumeral muscle motors, the co-ordinating functions performed by the liver and other internal organs. And, to go a step further, take the sensory departments. How about the wonderful optical plant in which colored moving-pictures are instantly taken and developed? How about the phonographic department where the sound vibrations are received, recorded and reproduced. And the sense of touch so delicate that the fingers can be trained to feel flat spots on a steel ball which are not apparent to the eye!

"Think of the thousands of functions performed automatically and those requiring judgment being cared for at the same time through other channels. You will agree with me surely that the body contains the most elaborate organization ever installed in a plant; that its component parts are examples of a finer kind of design than we will ever approximate and that the functions and their relations are co-ordinated more smoothly than we will ever be able to arrange in human relations."

A prominent statesman commenting on the above picture remarks that this great engineer is right and that he might have gone further.

"There are more mysteries in man than there are in

all the universe outside—more evidence of an all-wise, all-powerful, and all-loving Creator, and yet there are men who think themselves great, who even claim a monopoly of intelligence, who call themselves agnostics. These doubters could not live an hour if they were left dependent upon themselves. They could not expand their lungs or swing the pendulum of the heart if they had to do it by conscious effort.

“A kind, heavenly Father has so constructed them that the mysterious thing within them called life does its own battling and leaves the individual free to employ his time in nobler things than merely making himself live. How strange that any human being should use his time irreverently or waste it in frantic efforts to drive God out of the universe.”—COMMONER.

J. Arthur Thomson in his “Outline of Science” says: “We speak of the body as a machine, but it is hardly necessary to say that none of the most ingenious machines set up by modern science can for a moment compare with it. The body is a self-stoking, self-regulating, self-repairing machine—the most marvelous and unique automatic mechanism in the universe.

“In modern times a volume could be written on the teeth alone, the ivory gates of the body, and it would be a remarkable story. The receiving office, so to speak, of the mouth, is itself so deeply interesting and so full of ingenious contrivances that a whole section of this work might be devoted to it. Above the mouth are the sentinels, the eyes and nose. On the upper surface of the tongue there are myriads of sensitive little organs, taste buds, ready to apply a final test to the food.”

We could follow the many processes of nourishment and repair and describe the telegraphic systems of nerves, tubes, glands, and processes of assimilation and blood dis-

tribution as the wonderful machine functions incessantly in life's requirements. But suffice to say that all this wonderful process of muscles, brain, nervous system and combinations of bone and blood powers mark the wisdom and goodness of our Creator. They function in this wonderful machine to furnish the individual life with means to meet the exigencies and even anticipated demands of life, ever changing in its course and mazes.

TOPICAL SUGGESTIONS:

1. The structure and contour of the physical body, and its adaptations.
2. The movable foundations, strong bones, sinewy muscles with lubricating ducts.
3. The spinal column, its articulation most marvelous, supporting the cranial system.
4. The nervous system, as sentinels, report constantly their findings, giving warnings of danger and expressions of pleasure.
5. The circulatory system, including the heart or pump.
6. The pneumatic, digestive, cranial and generative systems.
7. The dermis, epidermis, hair constituting a waterproof covering.
8. Comments of a distinguished engineer, and a scientist, showing the marvelous construction and articulations of the body.

VII

MIND

IN considering the great manifestations of the goodness of God we see in the mind of man a benign purpose most wonderful and inestimable. In all the physical, mental and spiritual movements and their relations the activities of the Mind are outstanding. In fact within the conceptions of mind are lodged the great powers of achievement in all these spheres.

Man may have a physical body like unto that of Apollo and a brain of large proportions and a spiritually benign purpose well developed, but without mind to pilot, direct and plan all would be little in the affairs of life.

What then is mind? How does it function? What are its relations to the whole man? What purpose does it serve? These are questions apropos.

All psychologists and mental scientists agree that the seat of the mind is the brain which functions through the nervous system and that mind may be analyzed into its known functions. Formerly Mind was divided into the activities embraced within intellect, sensibilities and will. To-day they may be known as knowing, feeling and willing.

In knowing we find power to reason, weigh, calculate and discern.

In feeling, including affection, we realize ability to receive impressions and store them in memory as historical fact or for immediate use.

In will we find power to put into effect or motion the findings of knowledge or intellect which weighs the facts and the many impressions from which conclusions are made.

The mind in its activities functions through many avenues. According to the classifications of mental scientists, practically all of life's conscious activities, aside from the involuntary functions involved, are bound up within this power called Mind. With conscience as a counterpart of mind we have the character which controls to a very large extent the activities of the physical, mental and spiritual life.

The list of the functions above suggested cover the joys, pains and hopes of life. They include thinking, reasoning, emotions, memory, perception, association, imagination, instinct, habit and will, from which life's findings are gleaned and character is built.

Without this wonderful instrument given by our Great Creator, life would be a void and meaningless. It sleeps, it sings, it rejoices, sorrows, busies itself with life's duties, hopes for the best and finds its way out of the intricate mazes of life, bringing and weaving into the fabric of life the findings of the research through all creation. It reaches up to the starry heavens and asks the meaning of this wonderful dome. It digs into the earth and would demand a voice from the untold ages, it weaves in and out through the changes of life and questions every form of knowledge and imagination. It aspires to the highest and noblest conceptions of God and man. It cries with a loud voice for the Infinite throughout the vast creation. As the Biblical writer would say, "Oh, that I might find Him."

In fact without this marvelous instrument the whole creation "would be without form and void." At every

turn it places an interrogation point. It sees in the newborn child a being very old at birth, covered with the hoary hairs of heredity, possessing and embracing the mental powers and potentials of mind of all the ages past.

In all the activities of the physical body we see the benign purpose of the Creator as the mind of man directs it in all its relationships. In boyhood days at school and on the playground as the youngster weaves in and out among his playmates, now running, jumping, wrestling, playing ball or in the swimming pool, the little monitor coaches, plans and parries for every movement; and later, in business life, amid the strains and turmoils of time, he does not linger or halt when action is demanded.

The little girl may be found rolling hoop, fixing dolly's clothes, painting pictures or planning party, all under the directions and supervision of this secret, invisible creation called Mind. And later, among the never-ending demands of social and domestic life, even until old age, when the physical body is withering and the foundations are unsteady, this faithful servant stands ready to guide even to the brink of death, and finally say good-by without even a thank you for its lifelong care and protection.

The only rest required for all the labour of love is slumber's sweet repose as the physical body in sleep renews its potential energy and prepares for the activities of the new day. Even then, during the sleeping hours, it can be depended upon to sense the coming of the light, and as a sentinel responds to and announces the resurrection and the gift of the new day.

It not only guides the physical body through life, but in its mental activities absorbs from the wonderful crea-

tion around, from the experiences through which it passes, a foundation of faith in the higher and nobler and spiritual conceptions, running concurrent with all life. The lower gives way to the higher, the physical decays and passes, but the spiritual realities, absorbed under the spell of life's vicissitudes, are enlarged as things seen, fade and give place to the unseen. The mind lingers with the Palace until the whole is swallowed up in spiritual vision. The body decays, but the mind with the new vision may be quickened. We may exclaim with the Biblical writer: "Death is swallowed up in victory."

As we further consider Mind in its relations we must note the large part it plays in the affairs of life, giving ecstatic joy in pleasant memories of friends, functions, and associations, bringing before our minds visions of the past; as age grows upon us with these memories clearly defined it lays a foundation of hope for the future in enlarged anticipation of a joyous immortality.

How the memory leads us back in middle life and old age to the scenes of childhood and youth, ever lending its reflections to brighten the path of life even when adverse conditions throw their shadow athwart and confront our movements. As the poet Moore says:

"When time who steals our years away
Shall steal our pleasures too
The memories of past will stay
And half our joys renew."

Again, as George H. Betts says in his book, "The Mind and Its Education": "A good mind is an asset on which the owner realizes anew each succeeding day."

Having considered the Mind and the various senses, we must look into the Palace to see the King. What is His character? And how does He serve?

The mind and conscience of man form a combination to control the Palace. These are interwoven so that they function together marking the character. The senses respond to every call and order of their King. The nervous system made up of thousands of little sentinels report with lightning speed every approach of danger or carry forward the messages and orders of the King. They may be likened to little servants ready at the beck and call of the Master of the House to perform His bidding. Through these little bodies, figuratively speaking, operating through the muscles and nerves, the whole body moves and functions according to the mandate of the King. It moves from place to place or directs the activities of the various parts; and even the senses bow in obedience to His call.

If you would take for consideration the various members, such as hands, feet, arms, legs, and their functions, you will see that perfect harmony reigns within and without, and all are obedient to his will. The King may be a perfect man with physique reduced to form, so to speak, with limbs lithe, muscles strong, nerves calm, and mind radiant with optimism and conscience clear, forming a perfect specimen of life, harmony and form.

Having this fine combination known as Man, full of life and vigour, the goodness of God is manifest in placing within the functions of this wonderful Palace and kingdom the power of propagation, reproduction and continuation of the wonderful gift of life. All nature, as we see it in the heavenly bodies, with its wonderful laws and activities in space, the earth with its wonderful provision to nourish; all vegetable life with its wonderful laws bowing to man's hand; and returning seasons with gifts innumerable, all chemical laws with provision for tools, machinery, communication and transportation,

all move together to make this world, as it were, the Garden of the Gods, providing for man the Acme of His creations. Paul says: "The whole creation groaneth and travaileth awaiting the coming of the sons of God."

The wonderful power of conscience is seen in the great struggle depicted by Victor Hugo in "Les Misérables," when the hero, Jean Valjean, is brought face to face with the great issue of life. It has been called the Battle Royal, as follows:

"The old formidable struggle of which we have already spoken began once more—'Unheard of conflict' now takes place—at certain moments the foot slips; at another moment the ground crumbles away under foot.

"How many times has Conscience, made for the good, clasped and overthrown him (Jean Valjean). How many times had the truth set her knee inexorable upon his breast and he had begged for mercy. He had come to the supreme crossing of Good and Evil.

"Good and evil stand behind the severe interrogation point. What are you going to do? demands the Sphinx. One is never done with conscience.

"'Make your choice, Brutus; make your choice, Cato.' It is fathomless since it is God.

"One flings into that well the labour of one's whole life; one flings in one's fortune—one flings in one's riches—one flings in one's success. One flings in one's liberty—or fatherland—one flings in one's well-being—one flings in one's repose—one flings in one's joy. More, more, more, empty the vase, tip the urn. One must finish by flinging in one's heart.

"The obedience of matter is limited to friction. Is there no limit to the obedience of the soul? If perpetual motion is impossible, can perpetual self-sacrifice

be exacted? (This is evidently the begging of the soul for relief from conscience.) Martyrdom is sublimation—corrosive sublimation.

“Jean Valjean entered into the peace of exhaustion. He was as motionless as a corpse, while his thoughts wallowed on the earth and soared: Now like the hydra, now like the eagle.” “Have a thread in my heart which holds me fast.” It is when one is old that that sort of thread is particularly solid. “And life falls in ruin around it.” (Conscience.)

“I have tried to break that thread; I have jerked at it, it would not break. I tore my heart with it, then I said I cannot live without it. Then I said I cannot live anywhere else than here.” “You ask me what has forced me to speak? A very old thing, my conscience. To hold my peace was very easy. But there are two things in which I have not succeeded in breaking the thread that holds me, fixed, riveted and sealed here by my heart or in silencing some one who speaks softly to me when alone.”

It was the voice which spoke to Elijah, to Adam. It spoke to Jean Valjean.

“It is not enough to be happy—one must be content.”

“There is a silence which lies. An awakened conscience is grandeur of soul. The workman was horrible, but the work was admirable. God produces His miracles as seem good to Him.”

The conscience then is the final arbiter. As one writer, Stanisfer, has said: “Conscience is the silent witness that testifies at every trial of life.”

As before suggested—Conscience and mind, so closely associated, together in the character of man function as a personality, as a King in the Palace. He collects his data, weighs, dissects, analyzes, discriminates, adjusts

and reconstructs in his functions of thinking. As Dr. George H. Betts says: "All true thinking is for the purpose of discovering relations between things we think about. What a chaos it would be! We might perceive, remember and imagine all the various objects we please, but without the power to think them through together they would all be totally unrelated, and hence have no meaning."

Since we must think of all things in their relation to some other person or object there must follow a recognition in these relations of individuality and form.

Yet in considering the wonderful wisdom and goodness of God in the association of mind, conscience and personality we have not yet arrived at the greatest manifestation of this combination until we embrace within its scope the powers and potentials of love, which appears to be different from ordinary feeling or friendly affection. Love has been described in a wonderful word picture by St. Paul, and may be called the acme of his genius and his masterpiece.

1. Though I speak with the tongues of men and of angels,
And have not Love, I am become as sounding brass,
And a tinkling cymbal.
2. And though I have the gift of prophecy,
And understand all mysteries and all knowledge;
And though I have all faith so that I could remove mountains,
And have not Love, I am nothing.
3. And though I bestow all my goods to feed the poor,
And though I give my body to be burned
And have not Love, it profiteth me nothing.
4. Love suffereth long and is kind;
Love envieth not;
Love vaunteth not itself, is not puffed up.

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5. Doth not behave itself unseemly,
Seeketh not her own,
Is not easily provoked,
Thinketh no evil.
6. Rejoicing not in iniquity, but rejoicing in the truth.
7. Beareth all things,
Believeth all things,
Hopeth all things,
Endureth all things.
8. Love never faileth,
But whether there be prophecies, they shall fail;
Whether there be tongues they shall cease;
Whether there be knowledge it shall vanish away.
9. For we know in part and we prophecy in part.
10. But when that which is perfect is come,
Then that which is in part shall be done away.
11. When I was a child, I spake as a child,
I understood as a child, I thought as a child,
But when I became a man I put away childish things.
12. For now we see through a glass darkly
But then face to face
Now I know in part,
But then shall I know even also as I am known.
13. And now abideth Faith, Hope, Love, these three,
But the greatest of these is Love.

Victor Hugo also emphasizes the wonderful power and value of love, and gives it the highest place in his conception of life.

"If people did not love each other I really do not see what use there would be in having any springtime, and for my part I should pray the good God to shut up all the beautiful things that He shows us.

"Love is the only ecstasy, all the rest weeps. To love

or to have loved this suffices. Demand nothing more. No other pearl can be found in the shadowy folds of life.

"To love is a fulfillment."

In whatever way we may think of man, science tells us that "He stands unique and apart. With all his faults he has his ethical face set in the right direction. The main line of movement is toward the fuller embodiment of the beautiful, the true and the good, in healthy lives which are increasingly a satisfaction to themselves."—THOMSON.

TOPICAL SUGGESTIONS:

1. Within the conceptions of mind are lodged the great powers of achievement.
2. The set of mind the brain which functions through the nervous system.
3. Functions of the mind. Without this wonderful instrument life would be void and meaningless. How it functions in youth and old age.
4. Mind associated with conscience—The great struggle of Jean Valjean depicted in "*Les Miserables*."
5. The combination of mind, and conscience functions in character and life.
6. Victor Hugo's estimate of Love.
7. XIII Chapter of I. Corinthians.

VIII

INDIVIDUALITY AND FORM

IN consideration of Form as contributing to the welfare of mankind we must take up the findings of science along mental and physical lines.

The Biblical writer says: "The earth was without form and void." In other words, the creation must have been in a dim and obscure existence; no light, no vision, no form or shape by which to distinguish separate entity. And darkness was everywhere, suggesting that there was no visual or mental conception distinguishing individuality and form.

How then do we obtain form? Why form and for what purpose? How does individuality contribute to the welfare of mankind? These are questions which would naturally follow the suggestion of "without form and void." Betts says: "All true thinking is for the purpose of discovering relations between things we think about. What a chaos it would be! We might perceive, remember and imagine all the various objects we please, but without the power to think them through together they would all be totally unrelated, and hence have no meaning."

As we saw under the chapter devoted to Chemistry, our Creator, having created the Heavens and Earth, then provided laws for the preservation of man upon the earth, such as the laws of life within the seed for propagation and fruits abundant, like to produce like. He also provided the laws of chemistry for man that he might

co-operate with the Creator in working out the highest good, for the race. But without mental conception all would be void as suggested by Betts.

As the laws of all creation, as far as known to man, were evidently made for the development and welfare of man, so we may assume that, with this benign purpose in the mind of God, provision was made for the breaking up of the great void through the laws of mental conception, physics and chemistry. These laws, such as affinities, adhesion, cohesion, repulsion and expulsion, etc., operating upon the various basic principles of matter made them to find individuality and form within space, bringing out the individual characteristics of each, and bringing to view upon the horizon the known entities as we have them to-day.

As we dissolve, separate or unite and purify elements by means of heat and light, we may anticipate the findings made upon the gaseous mass called "void" when the great sun first poured forth its shafts of light and heat upon the dark mass. What a sense of power and majesty in the command! What a movement of mass, form and figure as every particle microscopic, telescopic, seen and unseen moved in mass formation or individual file to its own place, each particle as it were set apart,—a form within the mass or individual figure with unnumbered particles comprised within the whole. Or it may be the whole of nature embracing within its bosom the great basic elements, earth, air, fire, water and ether, moved in turn in majestic splendour at the command of God. Much of creation is still "without form and void" as far as man is concerned as he may not understand and perceive the relations of individuality and form.

Form and figure were then evidently conceived and pronounced as good for the welfare of mankind when the

dark mass called void was broken up and separated into elements, persons and particles, and were differentiated by individual propensities or affinities. As God in the creation of light, the complement of vision, has adjusted it in all its functions to bring to man's notice the various forms and figures of creation as he may be able to comprehend them; so that from the dust and crystal in the sand to the highest forms of creation, the beauty of nature is marked by form and figure. The leaves of the forest, the fish of the sea, the shapes of fruits and flowers, the stars of the heavens, the mountains snow-capped or sunlit, the flowing stream or the vast ocean bearing on its bosom the commerce of nations; even lava flowing from volcanic peak call forth our admiration as form and figure loom forth and each is marked as an individual entity.

And when we come to the animal creation, our nature's closer kin, we find individuality and form playing a part in life's drama, a rôle to cause delight. But as we higher scale Creation's lofty peaks, horizon large, to view the best of nature's gifts to man, one we see transcendent in her beauty, curves and shapes which none surpass, and all accord the place preeminent.

In life's great purpose, initiative, and higher joys, man needs her clasp of hand, to help as helpmeets can with cheering voice, approving eye, with face and form divine.

So, as we further view creation in mineral, animal and human forms, we can see the beautiful adjustments, adaptations, powers of assimilation and all with purpose to work out for man the highest good. If he needs food, the earth and air and gaseous mist conjure together, as he tickles the soil, to make abundant contribution to his lawful needs.

If man wants tools to till the soil for food, the laws of chemistry alike conspire to produce the plow, harrow, reaper and harvester. If he desires earnestly the other gifts of larger form he moulds the steel and iron into a system of transportation with cars and locomotive, with power. If he needs yet the quicker means of communication and knocks at nature's door with the ear close for answer, he finds the wires and telephone and radio systems, answering to his knock with responsive voice approving.

And if aloft, he fain would soar upon his vessel frail,
He finds the means, the motor forms, and headlight for the trail,

Above the mist, above the clouds, and higher still he strives,
The goal is reached, he earthward glides, again at home arrives.

But should he sense some higher goals, which in his visions beck,

He gathers hope and forms of grace upon the vessel's deck,
To these he adds the man complete for soul's eternal quest,
He takes the ship of Faith and Love and sails above the rest.

For identification, individuality, variety, which is "the spice of life," forms, figure and weight, all were created to conform to man's capacity to handle and use them. Form, figure, and all parts of man's own physical body are made symmetrical to conform to and articulate with the other parts, also to make a harmonious whole.

All things must work together for good. "Man does not gather grapes of thorns, and figs of thistles." But all things conforming to reasonable law, work in conjunction with, and articulate with other parts of the whole of which they are a part. Right here we must notice the law of form as it may be related to our general welfare; all parts and individual relations are articulated for their

purpose. The mountain and the mouse are so incongruous in their relations there is no need for argument.

So we see the beauty of form and figure as we more closely study them in their proper relations. The hand is shaped to perform the work of the hand and to wash the other hand. The foot likewise must articulate in unison with the other foot and to function in the sphere to which it is adapted. Likewise all the other organs of the body.

The laws of relationship and adaptation are certainly the great laws which speak for harmony as they touch man in their various relations in the physical, mental and spiritual world. The toe is not where the head is because in form and structure it could not perform the function of the head, and foot cannot take the place of brain because in form and structure it is axiomatically out of place and adaptation.

So thus in utility and adaptations of life Form plays a large part in the affairs of man looking to his happiness. When we approach the vegetable kingdom we see form and figure filling a large place. The appeal of form to the eye and sense of beauty is seen in the apple, peach, plum, in form and colour to suit the relations of the fruit to man, his sense of taste, and in form convenient to handle.

So, in all relations, form and figure must have their appeal either as individual entities or in their relation to other objects of creation besides having their relations to the whole of creation. All must articulate and function for the welfare of mankind in all these relations.

In animal life we see that the horse, dog, cat, have just such figures as are adapted to the functions of each.

In the family life the infant is adapted in size and form to suit the relationship. The mother and father with

natures and dispositions very different are yet adapted to the life and environment in which each is presumed to function. The young man or woman full of life and vigour finds joy and pleasure in the society of youth and in forms of life which suit them, but do not appeal to other members of the family.

So in all our relationships form and figure find a reciprocal appeal to suit the individual life or character.

In the world of science, as chemistry, geology, botany and in the study of these sciences, we find form and figure used, as necessity may require. Each is adapted to the sphere in which it functions.

For the physical, mental and spiritual development of mankind, it is essential that individuality, identity and differentiation of character be recognized else all would be a conglomeration of creation as at first when it was declared "without form and void."

Character of man is reflected by form in facial expression, carriage of body and even steadiness of the eye. The criminal of long experience bears the mark of dissipation in face and form unmistakable to close observation.

An artist desiring to paint a picture representing character clean, pure, untarnished by crime and dissipation, selected from a group of children, one with boyish, bright, innocent face. After painting the picture, the artist hung it upon the wall of his studio. The picture attracted the attention and admiration of many visitors to his studio. Twenty years after the same artist decided to paint a companion picture, depicting character in contrast with the angelic picture on the wall. He came upon a man with features, crime marked by years of vice, and had him sit for the picture. After the artist painted the picture, the man noticed the beautiful boyish face on the wall and

stood before it. He then remarked that, just twenty years before, he, as a boy, had sat for that picture. The artist noting the faint resemblance amid the marked contrast of feature, recognized him as the boy of twenty years ago. Crime and time had featured the great contrast between the boy with unsullied character and beautiful countenance and the man of dissipated life bearing the marks of vice of twenty years.

Without form and figure to mark identity, place, individuality, also to feature character and events, life would lose all charm and man would be merged into a life of outer darkness. If one would desire to paint a picture representing the lost of mankind it would be only necessary to vision him as back in outer darkness, in the first stage of existence.

Evidently the great work of creation is still going on and the major purpose is to differentiate man from man by marks of character.

In fact this appears to be the outstanding feature of the picture of the Great Teacher when he said: "The light shineth in darkness and the darkness comprehendeth it not," and "Ye are the light of the world."

As the sun diffused and broke up the void or physical mass at creation's dawn and by the laws of individuality sent each to its own place, so those who hold up the light of life, diffusing the light through the darkness of character mass will bring out the best of life to continue "as gold tried in the fire."

"The righteous shall shine as the light," shall be marked with individuality, stamped by character.

AT SEVENTY YEARS

All that I am or may confess,
But swells the weight of mine indebtedness;
Burdens and sorrows stand transformed all;

Thy hand's rude buffet turns to a caress;
For Love, with all the rest, Thou gav'st me here,
And Love is Heaven's atmosphere.

DAVID STARR JORDAN.

TOPICAL SUGGESTIONS:

1. "The earth was without form and void." Why form and individuality?

2. Chaos without individuality and form.

3. The separation of the void mass into individual parts and forms—light and heat as factors, and mind as necessary for realization of individuality and form.

4. All forms and shapes with individuality adapted to functions of each. Forms in mineral, vegetable and animal kingdoms.

5. The laws of chemistry assisting man in moulding and producing tools, machinery for agriculture, business and general commercial life.

6. Beauty and utilities of form. Adaptation of form and figure to functions of each.

7. Character marked by figure and form—illustration. Life uninteresting without individuality and form.

8. The outstanding purpose of all teaching to bring out character marked by lines of light and right.

PART III
The Sociological Life

IX

SOCIOLOGY

HAVING considered many of the laws which contribute to the welfare of mankind, we must now take up the study of Sociology or social science, which treats of the constitution, phenomena and development of human society or relationships.

From the earliest history of the race man has been a social animal. It was announced by the Biblical writer that "It is not good for man to be alone." Probably the greatest punishment which can be imposed upon a man is solitary confinement, often imposed upon recalcitrant criminals in penitentiaries. So the creation of man and provision for his highest enjoyments, also for his preservation, call for companionship and association. A man or woman having no companion will find large comfort in calling in the bird, cat, dog, or some other domestic animal to share his companionship or loneliness and find much joy in mingling with these creatures of God's wondrous creation.

Having this trait woven within the fiber of our character, we must look for the goodness of God in the world of social relationships.

Of course God's greatest gift to man is woman, from whom "Let no man put asunder." The answer is emphatic and unmistakable. Growing out of this fine association come the children of the home—then the larger association of the family life, then follows the mingling of the life-giving stream with other families of congenial

type and sympathetic aspirations. And as the stream spreads out and the channels deepen the normal man with the larger and even broadening associations finds his chief delight in their companionship. Next to that of wife and mother, is the prattle of children of the home.

The ever-changing phases of domestic life with children to come to parents with problems and the childish delights expressed as their seniors unravel their knots is a vision which an angel might cherish. The picture of the child with dolly's broken shoe asking the shoemaker to fix it is both beautiful and impressive.

After the fine associations of home life we have the mingling of the children in school life; and later in religious, political and public life, all normally working with altruistic purpose for the mutual betterment of all.

In early historic times the children were not given such a large place in society as at the present time. Among the less civilized and barbaric tribes babies were sacrificed and thrown into the Ganges, or under the Jugger-naut car. But as man has become more enlightened, and as education's clarifying vision has removed the scales from the eyes of society, the joys of life have increased and life prolonged. Within the last 30 years the average life has been prolonged from 35 to 45 years.

After the fine family relationships showing the benign purpose of God, we take a step further and see the beautiful associations and friendships formed in the world of school life.

A beautiful picture could be painted of primary school life, depicting the feelings and passions flooding the life and character of the little boy or girl as he or she leaves home the first day for school to mingle with other children of like feelings, amid the fears and trembling of

this new life. How will the teacher look? What kind of children will be in my class? Who will sit next to me? What a rush of questionings and feelings mingled with the uncertainties of this life as the little one takes courage and marches into the presence of teacher and the new child companions?

One can never forget the pleasant memories of these school days with their deep joys and little fears, also the deep impressions made as the little folks mingle in class, on the playground, and in confidential secret relations stirring their little lives as they go in and out weaving the threads of life among the mothers, fathers, statesmen, preachers and teachers of the future. And, alas! also among those who will find places behind prison bars, in asylums, the dark places of night life and red-light district. No wonder the song "School Days" became so popular and took a fast hold on multitudes as it was sung behind the footlights and in community gatherings, as well as in the slums and places of lowly abode some years ago. It carried many a grown-up back in memory to the almost sacred precincts of those days and the schoolmates long loved and lost awhile.

Then following these days come the grammar and high school days, when life becomes more realistic with its more serious problems both in school and social life. The boy and girl begins to realize the more serious side of life. He or she begins to make comparisons to differentiate and tighten the cords of companionship, and finally may find in these associations the one outstanding companion of life.

Or he or she may go on to the weightier matters of college or university life, where relationships are marked by more serious problems.

As there was a difference featuring grammar school

and high school, differentiating them by change of association and comradeship, so here in the university or college life a change of atmosphere is found, marked by a broader outlook into life,—a new charm, much like that of the high-school association, yet different in that it possesses sterner phases as one meets upon the broader field of activities.

In intellectual contests one is matched with the select and keen minds of many high schools; in athletics with the picked, strong of muscle and fiber, and mental perception quickened to circumvent and parry strength. The social vision borders on awe as one sees the stars of the higher lights, the stately junior and reverend senior as they move in dramatics, social and conspicuous places. The verdant freshman wonders whether opportunity will be so kind to him as he peers into the coming years in vision. The new life of religious vision may here be awakened. Here also the fraternity life or social club or select student companionship will carve out as with a chisel the lines of character to mark him for future associations, whether for higher or more noble things of life, or for the common level of mediocrity.

In these relations of intellectual culture athletic contests, social opportunity, and religious vision, we can see the goodness of God in thus charging the character of man with this passion for comradeship with all the desires and aspirations to measure up in life's contests to excel or show one's self worthy of the opportunity afforded. To fail or be noted as one unfit is a mark which either impels one on to higher and stronger effort or as a millstone may cause him to sink.

Thus during the splendid associations of school and college life the young man or woman lays the ground-

work and foundation for his future activities. The last and closing stage scene is:

The Commencement—the vestibule of real life without fuss and feathers.

After grammar and high school life, and the sterner experiences of university life, we find the young man or woman entering upon the more austere relationships of commercial, industrial, political and religious activities, weaving in and out among men of various types, throwing out to his companions and associates the many influences acquired in the former associations. In the commercial and industrial life the finer and nobler qualities are found mingled with the more sordid and selfish phases. He must here learn to discriminate between the square deal and the crooked path which are often presented and placed before him for choice. One promising gain by short cut or compromise of principle, meaning gain with seared conscience and character lowered—the other a moderate promise of reward with hard work and probably longer path, yet the latter spells life with smaller wealth but with contentment.

“If contentment, the parent of felicity and the faithful companion of hope, would whisper her consolations in our ears in vain might fortune wreck us on inhospitable shores.”

Probably the finest expression of this sociological law of desire for companionship is manifest in the family relations above mentioned.

Then come the close associations of comradeship and friendship seen in school life—following these phases we find the good-fellowship of the church life marking a large factor in the lives of church-going people and members of the various religious bodies. In the activities of church-going people and religious life men are drawn

into very close friendship as they mingle in services designed for the consideration of God in His relations to man and Divine Providence manifested in His care and provision for mankind—accompanied with the altruistic motive which would grant and provide all such blessings for all mankind.

This phase of sociology or social relations is probably the outstanding hope of the world for the elevation and perfection of man's character. The inspiration gathered by these associations in church and altruistic gatherings growing out of same push the members of such out into the various avenues of life into the activities designed to uplift and provide for the betterment of mankind. The high and lowly here meet as brethren around one common table and make common cause for the advancement of righteousness—both as individuals and as an organization to make known the privileges and benefits of the God-given spirit of righteousness among all nations, that all men may come into good-fellowship and promote the kingdom of peace and good-will among men. This wonderful good-fellowship to which all men with a desire for right living are invited is probably larger in its scope and far more reaching in its activities and vision than any other.

Into this fellowship and good-will men, women and children are invited and mingle in harmonious unison. It would embrace the world in its activities and reach to the ends of the earth in its efforts for the betterment of mankind as noted in the large and far-reaching missionary efforts marking the program of churches in recent years. Altruism, good-will, education, scientific investigations through the schools, with a desire to reach the highest solutions of life, mark the program of these organizations.

Then in the consideration of the altruistic association of men we would note the various Orders with ultimate object the same but varying in methods of functioning:

The Masonic order with its many degrees and phases of membership; the Odd Fellows and Knights of Pythias with their purpose of promoting kindness and provision for the suffering; the Rotary Club and Elks, with a view of advancing good-will along social lines; the Commonwealth and Kiwanis Clubs, helping in lines of commercial and economic movement; the Y. M. C. A., Salvation Army, Knights of Columbus, and other sidelights of church life; labor unions, under the various heads such as the Federation of Labour, Locomotive Engineers, Builders' trade unions, etc. All working for the betterment of industrial or labour conditions. Also the many financial organizations to work out the intricate problems of finance and economic law. All these, under some law or principle, look to the improvement of the relations between men. "The ways are many, the end it is one," says Tupper.

As an illustration we might note the Father of Waters, the great Mississippi River. It begins its flow and rises in the small Lake Itasca and flows down towards the southland. It gains momentum and volume as it stretches out its course, cutting and deepening its channels as it goes. Then it receives other streams from the mountains of the Appalachian chain and Alleghany mountains, bringing in the waters of the Alleghany and Monongahela forming the beautiful Ohio which receives the Tennessee, the Wabash and others, and mingles its flow with the great Mississippi. Then on the western side we see the great Missouri, the Arkansas, Black and Red rivers bringing in the waters from the great plains and Rocky Mountains; these all mingle in an harmonious

whole as they continue their flow south and form the great Father of Waters. They are fed by springs, and floods of mountains and plains, and sing their songs of joy and good-fellowship as they mingle with their neighbours from afar.

The praise of the beautiful states from which they came and their notes are heard as they send their currents swiftly flowing over rock or cliff and through the deeper levels of surging currents and whirlpool—then, as if forgetting the beautiful lays of homeland, they mingle their joys with the waters of many climes, and sing another song of higher and loftier note as they surge into the channel of the great Mississippi, forgetting, as it were, the smaller differences as it rushes on toward the Gulf.

They now speak not of their sources among the mountains and plains from whence they came, or of the states through which they flowed, but of a united nation, a stream which flows on to the larger and broader body of water and loses itself as it mingles with the great ocean which reaches to the shores of all lands and all peoples.

So these great organizations, with the church, as they function and mingle their efforts in alleviating the sufferings of mankind, move on towards the goal of good-will and fellowship which will eventually embrace all mankind.

ABOU BEN ADAM

Abou Ben Adam (may his tribe increase)
Awoke one night from a deep dream of peace,
And saw within the moonlight in his room
An angel writing in a book of gold;
Making it rich and like a lily in bloom,
Exceeding peace made Ben Adam bold
And to the presence in the room he said,

"What writest thou?" The vision raised its head,
 And with a look made of all sweet accord
 Answered, "The names of those who love the Lord."
 "And is mine one?" said Abou. "Nay not so,"
 Replied the angel. Abou spoke more low,
 But cheerly still and said, "I pray thee, then,
 Write me as one that loves his fellow-men."
 The angel wrote and vanished. The next night
 It came again, with a great awakening light,
 And showed the names whom love of God had blessed,
 And lo! Ben Adam's name led all the rest.

LEIGH HUNT.

WHICH SHALL IT BE?

(Illustrating Family Affection)

Which shall it be? Which shall it be?
 I looked at John and John looked at me.
 (Dear patient John, who loves me yet
 As well as though my locks were jet.)
 And when I found that I must speak,
 My voice seemed strangely low and weak:

* * * * *

"Tell me again what Robert said,"
 And then I, listening, bent my head.
 "This is his letter: I will give
 A house and land while you shall live,
 If, in return, from out your seven,
 One child to me for aye is given."
 I looked at John's old garments worn,
 I thought of all that John had borne
 Of poverty and work and care,
 Which I, though willing, could not share;
 I thought of seven mouths to feed,
 Of seven little children's need,
 And then of this, "Come, John," said I,
 "We'll choose among them as they lie
 Asleep;" so, walking hand in hand,
 Dear John and I surveyed our band.
 First to the cradle lightly stepped
 Where the new nameless baby slept.
 "Shall it be Baby?" whispered John,
 I took his hand and hurried on

To Lily's crib. Her sleeping grasp
Held her old doll within its clasp;
Her dark curls lay like gold alight,
A glory 'gainst the pillow white.
Softly her father stooped to lay
His rough hand down in loving way,
When dream or whisper made her stir,
Then huskily said John, "Not her, not her."
We stooped beside the trundle-bed
And one long ray of lamp light shed
Athwart the boyish faces there,
In sleep so pitiful and fair;
I saw on Jamie's rough, red cheek
A tear undried. E'er John could speak,
"He's but a baby, too," said I,
And kissed him as we hurried by.
Pale, patient Robbie's angel face
Still in his sleep bore suffering's trace.
"No, for a thousand crowns, not him."
We whispered, while our eyes were dim,
Poor Dick, bad Dick, our wayward son,
Turbulent, reckless, idle one—
Could be spared? Nay, He who gave
Bids us befriend him to the grave.
Only a mother's heart can be
Patient enough for such as he.
"And so," said John, "I would not dare
To send him from her bedside prayer."
Then stole we softly up above
And knelt by Mary, child of love.
"Perhaps for her 'twould better be,"
I said to John. Quite silently
He lifted up a curl astray
Across her cheek in wilful way,
And shook his head: "Nay, love; not thee,"
The while my heart beat audibly.
Only one more, our eldest lad,
Trusty and truthful, good and glad—
So like his father. "No, John, no—
I cannot, will not, let him go."

* * * * *

And so we wrote in courteous way,
We could not give one child away;
And afterward toil lighter seem'd,
Thinking of that of which we dreamed,
Happy in truth that not one face
We missed from its accustomed place;
Thankful to work for all the seven,
Trusting the rest to One in heaven.

ETHEL LYNN BEERS.

TOPICAL SUGGESTIONS:

1. Man a social being. "It is not good for man to be alone."
Solitary confinement, greatest punishment.
2. The development of the family the basis of social relations.
Scenes in the child life.
3. School life, the mazes of school associations, companionships
and friendships; high school and University life.
4. Church and society associations.
5. The many orders and clubs all working with definite purpose
for the accomplishment of some good end.
6. The great Mississippi River and tributaries illustration of
the development under these associations.
7. Development of good-will in all altruistic associations.
8. "Abou Ben Adam" and "Which Shall It Be?"

X

CO-OPERATION

IN all our discussion of the goodness of God as manifest among men we must consider the spirit of co-operation so prevalent in our government and among individuals, classes and nations—in political, religious, educational, domestic and industrial life.

In the field of government men have grown and developed from the individual or patriarchal and tribal forms of government to the highly organized form as we find them to-day in the outstanding national, state and municipal governments.

We could trace the history of these developments but suffice to say that a surface survey would show how gradually the spirit of co-operation has worked throughout the world and brought man to his present state of fine altruistic motive.

In the times of the patriarchs the father of the family was the controlling figure. Later the tribe, consisting of few or many families, combining, and electing a chief, either from outstanding bravery, ability to slay men or as hunter of animals—then followed the larger combination of tribes and the welding of them into states; then the still larger combinations of states into empires and national governments, as we see them to-day in the British Empire and United States government. But along with this larger organization there have grown up within the national government the minor forms, but subject to the national, the municipal and county forms, all

working together and co-operating with each other as wheels within wheels of machinery to work out the good of the whole. And along with these various forms we still maintain the patriarchal form to a limited extent as we find it in the family relations. These various forms of government have developed as men have learned to trust each other or to co-operate for protection, economic advantage or the higher ideals of altruistic purpose,—such as in educational and religious purpose.

Not only have the peoples become highly organized along the above lines but the same spirit of co-operation is manifest as we study the ways and means by which men are led into a state of almost care-free and pleasurable condition of society.

Formerly during the tribal period the individual man was required to be prepared with his club or axe in hand to meet the attack of the enemy tribe—and during the reign of the feudal barons the walled castle was built to guard against the attack of the enemy, and the feudal lord was supposed to care for his subjects and they in turn to work at his direction. Then later a smaller number, relatively, were required to serve as armed guards to insure their security while the rest could give attention to the higher lines of thought and development.

So we have men co-operating in government to-day with a fine community and national spirit working out the highest and best for all.

In our common currency system we have a fine medium of measure and exchange, common to all the people and so simple that the children can comprehend and employ same—for value received, as often quoted in our commercial activities, the deal is complete; while formerly it was a question of exchange values between states and large discounts for the weaker. Before the common medium

of monetary exchange came into vogue, leathers, hides, pieces of metals and other commodities were used as currency.

Then came money values or stamped metals or paper form with the endorsement or guarantee giving confidence according to ability to pay—even up to the time of the civil war the moneys of the various states were valued upon the ability or security involved, until we have to-day an almost perfect system of currency based upon sound principles and enjoying the confidence of the world. All this has come through co-operation and the fine confidence manifested in our government.

Again we have the common law for all, applied by judicial courts alike for all the people with comparative justice in the administration. The laws, the courts and administration of the laws are all the products of the people in common. Thus from the point of economy, liberty of action and promised justice the co-operative spirit as related to laws and their application both in civil and criminal procedure has advanced to a point of almost complete confidence.

It is shown in our police system, the product of common approval insuring society against the vicious and criminal classes, inspires confidence and allows men to devote their energies to the higher things instead of having them paralyzed by fear and insecurity.

In our educational system we find the co-operative spirit working out most beautifully where all the people join by a common system of taxation to provide means for the education of all the children, rich and poor alike.

In this phase of co-operation all are pointed to the highest ideals and may be found in equality before the law, society and educational advantage.

It is shown in the use of our streets, our water systems,

our health departments, our sanitary provisions, our hospitals to serve the poor and rich alike, our common Sabbath or day of rest for all, holidays, etc. None of these fine provisions of society could be ours were it not for the spirit of co-operation so manifest by all.

Then we may look further to the great railroad systems, freight and passenger travel systems, provided by the spirit of co-operation as found in the associations of man and the financing of these great systems in order that all the people may enjoy these privileges.

Men, women and children may travel around the world with almost perfect security on rails and steamships provided by men they never saw or need to see upon the payment of a small profit on the original investment.

We live in our house built by men we never saw or knew, build our fires with coal and wood furnished from mine and forest amid all the dangers of mining and milling; and we eat our breakfast with knives, forks and spoons made thousands of miles away by men of foreign tongue or nativity. We dress ourselves, put on our shoes and walk upon our carpets made and furnished by men and women and children whose names and language we can scarcely guess. We read our newspapers every morning furnished by men working throughout the night amid telegraph wires, type, machinery and the clicking of wheels and rolls, little thinking that we are enjoying privileges which were unknown to the kings of earth a few centuries ago. We send our children to school to teachers whose lives have been spent, many of them, 'mid the hardships of student life and self-abnegation.

Our families ride upon the street cars or in automobiles built thousands of miles distant and no questions asked if you can only pay the small fare—and upon electrical railroads whose power comes from the water falls

of the high Sierras or the rapidly flowing river many miles away. We attend churches whose preachers perhaps have striven amid humble surroundings to meet the requirement of present-day demands.

Our hats and ornaments alike are provided by men whose lives are spent amid the cold winters of far north or in the hot and sunny climes of the southland. We pay the price and obtain the goods.

Our electric system supplies the lights for house or power for machinery carried from far distant plants. We ask no questions as to how.

The moving-picture may thrill our minds and the lessons of the screen charm our vision, yet we may never consider the necessary co-operation and fine adjustments required to produce the wonderful effect in the combination employed. The theater itself is a marvel of beauty and architecture provided under this wonderful law of co-operation among men.

So when we dwell upon these laws of co-operation, as they work out among men, and note the fine spirit of confidence manifested, we might wish that a modern Psalmist might write his findings and in an inspired vision paint in language understood by every human being, the wonderful manifestations of God's goodness in instilling into the mind and soul of men this spirit of confidence and co-operation which is working out so beautifully for mankind into the better way and perfect day.

THE PHYSICAL MACHINE

Each system ever working true,
And helping in its station;
They teach a lesson to mankind
And show Co-operation.

They all combine in nature's task
To serve the King in action,
Each part and system in its place
Is suited to its function.

Each separate would miss the mark
And die in the endeavour;
But in the combination strong,
Goes on and on forever.

TOPICAL SUGGESTIONS:

1. The development of phases of government.
2. The patriarchal, tribal, state and national governments and their functions in development of the race.
3. Wonderful spirit of co-operation as nations and governments advance.
4. Co-operation in industrial pursuits, commercial and social life.
5. Our common currency, common law, common courts, and common schools, common system of taxation, common police force, streets and water system in common.
6. The practice of co-operation has developed confidence and abilities to plan and execute on a large scale. Co-operation cements and concentrates effort.
7. Confidence, the mainstay of all social and commercial relations, is developed by co-operation.
8. Co-operation with confidence is working out the *summum bonum* for mankind.

XI

PROVIDENCES OF LIFE

IN our several spheres, busy amid the stream of events as they come flowing into our lives, we are liable to think only of the more tangible things and neglect recognition of Divine Providence as manifest to those who regard more closely the happenings and events as they dovetail into one another. These providences are recognized by thoughtful men. Our purpose is to show in a measure how these providential occurrences have served as pivotal points in history, changing both form and ideals of civilization.

As we look about and note the wise provision in nature, with its many forms of life and the harmonious articulation of these forms, as they function in their evident purpose, we marvel.

If we consult the horticulturist or botanist he will take up the microscope and point out the provision made with stamen, calix and corrola and pistle both for seed for propagation and food supply most marvelous.

As we take a step higher and enter the field of Physiology, the physician will show you how wonderfully nature has provided for all reasonable eventualities, covering the time of conception of life to the years when the child is expected to be self-sustaining, and even to old age.

As we consider other fields of science and mark how nature has provided through the many laws of chemistry, dynamics, astronomy and geology for the welfare

of man we can see, as pointed out by the many previous chapters, that without stint or limit the goodness of God is manifest.

As we find in vegetable and all animal life this wise provision, may we not look for same as we peer into the relations of man in government and individual relationship?

As we turn back the pages of history and note the pivotal points of same may we not inquire whether Divine Providence has not figured very largely in turning events to work out the *summum bonum*, or highest good, for the human race?

In considering the Biblical story of the Tower of Babel, whether in the sense of allegory or facts of sacred history, we can see that such a conception as pictured—concentration of men to a point with the idea of reaching the unknown by means of physical powers and the destruction of said purpose—may be considered in accord with the Divine purpose to scatter men throughout the earth that they might inhabit and subdue it.

We can also see the purpose of Divine Providence in the call of Abraham from Ur of the Chaldees to plant a nation at a point in the world's great crossroads between Europe, Asia and Africa, in the land of Palestine where the influence of the nation which alone recognized God as Jehovah and the only true Lord of Creation; and again in the fact that the Great Teacher of all the ages should be born here.

Like the pollen of the flower and the fertilizing juices of animal life is the influence of this race upon the civilizations in their migrations woven into the life of humanity.

Again we see a wise Providence in the distribution of the wealth of the world in order that man might be at-

tracted to it, either through necessity, love of adventure or desire to obtain the advantages which these objects of wealth would furnish.

The special sources of wealth in all lands in many cases have remained undeveloped and hidden until such times as the special use of these was required by the necessities of man. The fertility of soil in large stretches of country, and the climatic conditions suitable to life and cultivation, have served to preserve the lives of the inhabitants in all lands when the lands have been cultivated with reasonable care. But the populations of such lands are liable to become congested unless some impetus is given in the way of attraction to other lands.

It may be the necessities growing out of the congestion or the new developments of civilization calling for the use of things to be found by migration and adventure into other parts of the world. Or it may be the suffering incurred by racial or religious opposition causing such movement.

Inventive genius, industrial and commercial necessity, or desire of knowledge, or gain, and even religious freedom, have all served to cause such migrations and settlements of the various parts of the earth, all of which may be considered providential in a measure to provide for man's sustenance and happiness.

The new world was not discovered and inhabited until Columbus, with a conviction that the earth was round and desire to reach a shorter or easier route to the East Indies, and with the adventurous spirit developed sufficiently, would take the chance.

The spices of India may be the attraction, the fur skins of the far Arctics, the diamond mines of South Africa, the gold of California, or the hidden wealth of coals, oils and other minerals, as man's need and call for

them may demand migrations to secure them. Or it may be that the philanthropic motive or religious passion or scientific investigation, seeking knowledge may move him on toward the larger development and use of the world so wonderfully provided.

In earlier times the necessities of fertile soils and well-watered lands, with food for family and stock, were the prime causes of migration. Then as trading and commerce developed came the more intensive cultivation of lands for crops and goods for trading; hence the development of the forest and mines. Then later came the industrial period, with the discovery of steam and use of machinery, utilizing the ores of the mountains and mines, with coal and oils for fuel. Then the building of the larger vessels for ocean travel and trading between nations and continents, until to-day the world is well inhabited, the population well distributed and the world is one seething, pulsating, vibrating industrial and commercial whole. When the first telegraph system was completed and the first message crossed the wires, it read, "What hath God wrought?"

It was considered so wonderful, but now with the wireless telegraph and telephone, the phonograph and moving picture, the industrial wonders of machinery, the automobile and aeroplane, and with the healing process developed in hygiene and surgery, and the end not yet, may we not again exclaim: "What hath God wrought?"

As we consider nations in these migrations of the races and the contacts involved, in their trading and commercial relations, as well as in their hostilities, we may note the fall of Rome. When it failed to function as a progressive factor, apparently resting in its imagined security, and an earlier period pronounced by Cætiline as "degenerate, gross, defiled, the tainted haunt, the gorged

receptacle of every slave and vagabond of earth, a mighty grave that luxury has dug to rid the other realms of pestilence," at a time when the great empire was no more worthy to guide the destinies of men, it was invaded by the great hordes from the north under Alaric with his barbarian armies which swept over the great cities, taking the best and leaving much of the worst.

But even here we see the finger of Providence, as Rome had built up a wonderful system of laws and the Latin language which became the heritage of these barbarous tribes, and were spread among the invading peoples, as well as contributing to them much of the acquired culture of Rome. She was weighed in the balance and was found wanting.

So Egypt, Assyria, Carthage, Persia, all likewise fell.

We can follow down through history and see how the various races and nations, as they have been invaded by foreign powers and even by less favoured nations, the invasions coming at a time when luxury and licentiousness prevailed, have failed in the great purpose of life, and have been swept from power; yet contributing some outstanding cultural product of the nation's genius.

Rome contributed the Latin language, and many phases of law in use to-day. Greece likewise, with its elegant language and fine cultural development of art, as painting and sculpture, with its poets, orators, philosophers and great men of large vision as Homer, Demosthenes, Aristotle, and others, all arriving at a high degree of culture and mental power, lapsed back into mediocrity.

Spain, once the mistress of the world, likewise passed up the sceptre after her wonderful functioning in her new world discoveries.

Likewise other nations, as Russia, Germany and Aus-

tria, all having played their part in military, industrial and commercial activities, have fallen back in the struggle among the world powers.

The question now may be apropos: Will the now outstanding nations of the allied powers be able to hold their positions of prominence, or will they fall as the others in their failure to measure up to the higher requirements of Divine Providence?

As nations and powers have fallen after having functioned in a large way to advance civilization, so men have risen and fallen as they failed to vision and grasp the higher purposes of life's great movements and responsibilities.

And again it would appear that, when the world emergencies arise, requiring men and women of large vision and calibre, such leaders are produced by the crises involved as Moses, Esther, Charlemagne, Jeanne d'Arc, Washington, Lincoln, Haig, and Pershing, all apparently meeting the exigencies of the crisis, and all outstanding as righteous characters.

In the migrations of peoples from the various causes into the uttermost parts of the earth, and the mingling of the races in their search for wealth, desire for comfort and educational advancement, we can trace the hand of Providence in thus throwing together men into these farthest parts, causing them to mingle in all these relations in trading, in commercial, industrial, social, educational and political life in order that the spirit of courtesy and good-will might be developed. The Great Teacher on a certain occasion said: "Where two or three are met together in my name (loving-kindness) there am I in the midst."

The spirit of courtesy and kindness can best be developed where men meet in the spirit of good-will on

the street, in the counting house, in the factory or mine, in the commercial and industrial world, in the church and social congregations, in political and economic assemblies, and in the fine family relations prevailing among men.

As we watch the crowds in the street as they weave in and out along the banquet or in automobile, and in the great congregations of people as they meet together for the various purposes of life, we marvel at the orderly and courteous movements of all, and can note the genial spirit and the happy expression attending their general demeanor. When we compare this happy condition with the tribal wars and warfare which prevailed in the earlier periods of history, and consider the vast populations of the modern world, we can see that there are comparatively few people engaged in hostilities to-day compared with the proportion formerly so engaged.

And even during the great World War the mingling of soldiers from the antipodes and farthest reaches of the earth in their military relationships and fellowships was conducive of a friendship and cordiality probably never so far-reaching for good in the history of the world. The enlightenment along social, industrial lines and lines of higher ideals and aspirations, was probably more broadly and keenly advanced than during any other campaign in history. Men may make war and try to destroy, but their works and deeds can never circumvent and annul the great purpose of the Creator in eventually producing a race worthy of His care and preservation, whose lives will respond to the call and challenge. All things work together for good to those who respond according to His purpose. "The stones would cry out if necessary."

The organizations for the accomplishment of this

great program are evidently in existence to-day; and as kindness and good-will are the greatest assets in business, also in the social and industrial world, why should we not emphasize courtesy and kindness in our teachings to children in the schools as well as in the churches, lodges and social organizations and family relationships?

We must not fail here, but rather emphasize courtesy and kindness and score at this point.

One of the outstanding expressions and marks of a lady or gentleman is courtesy and kindness.

PROVIDENCE

We may try to dam the stream and halt the flow of the evils of war by scrapping battle-ships; but the stream will remain muddy and the waters foul unless we demand systematic teaching for the children of the world of the principles of courtesy, kindness and good-will, which are the higher ideals of Americanism. These alone can stay the evils of war in the future.

The formula was given nearly two thousand years ago: Good-will and peace—the alternative is hate and war.

These two formulae are axiomatic in their operations and their conclusions are inexorable.

Why not send 100,000 American school teachers throughout the world by using the money saved by scrapping the battle-ships for ten years?

Or it may be that the nations now owing America large debts could pay a portion of the interest in defraying the expenses of such teachers in foreign countries.

It would pay every nation one hundred fold to engage and defray the expenses of such teachers for ten years.

And it would pay the United States to allow much of the interest on the national debts to go towards paying

the expenses of said teachers in inculcating these highest principles of life in all the children throughout the world, the central powers included.

While we are trying to destroy war, why not do the work thoroughly? We have object-lessons along this line in the Philippines, so it will not be an experiment.

The writer believes that every nation would welcome such teachers from America; lecturers, sports and movies illustrating these ideals would be apropos.

In case this spirit of courtesy and good-will could permeate mankind as it should, the present generation of men might measure up to the requirements, whereby the purposes of Divine Providence could be fully accomplished.

We chide and decry those who, for sport or greed, cause the cocks to fight in the cock-pit, and the habitués of the bull-ring for this sport and cruel propensities, satisfied by the bull-fight, while we, for pique or greed, will cause our children to slay each other and because their elders lack the mentality to prevent the cruelties of war.

The time has come to stop and cease such cruel triflings and give ourselves to the higher and better arts of peace.

The old formula in a new triangle may function in: Courtesy, Kindness, and Good-will.

In the beautiful but sad picture as seen in the painting "The End of the Trail," there is not only the concept of the feeling, condition and spirit of the man and beast at the end of the trail, but there is a picture of a race and people who have contravened by life and action the purposes of the Creator and have failed to co-operate with Him in His great plan. There is the collapse, as it were, after the long journey and years during which

they failed to arrive. "The journey is done—the race is gone."

It may be described in the language of one who painted a word-picture of the American Indian. He says: "As a race, they have withered from the land. Their arrows are broken, their springs are dried up, and their cabins are in the dust. Their council fires have long since gone out on the shores, and their war cry is fast dying away to the untrodden west. Slowly and sadly they climb the distant mountains and read their doom in the setting sun. They are shrinking before the mighty tide which is fast pressing them away. They shall soon hear the roar of the last wave which shall settle over them forever. Ages hence the inquisitive white man, as he stands by some growing city, shall ponder over the structure of their disturbed remains and wonder to what manner of people they belong. They shall live only in the songs and chronicles of their exterminators. May these be faithful to their rude virtue as men, and pay due tribute to their unhappy fate as a people."

In 1865, when word reached New York City that Lincoln had been shot, crowds gathered in the streets and soon excited masses of men were surging up and down the avenues. Nobody could say what would come next. Young General Garfield, afterwards president, was in the city, and was requested to speak to the people. He stood on the veranda of his hotel and in his efforts to allay the excitement he uttered these words, "God reigns and the government at Washington still lives." As those words echoed through the throngs, the people became quiet and soon began to disperse. They went to their homes feeling that, even under the stress and strains of governments, a sympathetic hand rules and guides the ship of state, and that men can trust the eternal, benign purpose.

TOPICAL SUGGESTIONS:

1. Providence recognized by thoughtful men. Pivotal points in history.
2. Biblical history of human development. The Tower of Babel.
3. The planting of a race at a strategical point at the cross-roads of the continents.
4. Wealth and fertile lands placed at strategical places, which appeal to man and cause distribution of the human race.
5. Migration of races and peoples involve contracts which develops altruism.
6. Empires and nations of the past failed because they did not sense the main purpose of life and wasted their great opportunities, but all contributed something to language, law, social or commercial life for development of man.
7. The good results growing out of the great world war.
8. The formula—Courtesy, kindness and good-will functions in peace and harmonious relations.

XII

STABILITY OF LAW

HAVING considered many of the laws governing the movements of man and the adaptation of the Creator's laws to man's need, we shall now take up for observation the benign purpose served in the Stability of Law.

In the study of astronomy and the laws of force operating among celestial spheres, we note the exactness and precision with which these bodies function under the laws of gravitation, centripetal and centrifugal forces. In all these movements of the heavenly bodies we see permanency and stability challenging our admiration and we wonder as we observe the mathematician and astronomer calculating with practically absolute precision and exactness the seasons, times, orbits, ecliptics, and the revolving motions of the farthest star, sun or system.

Well has the Biblical writer said: "In Him there is no variableness nor shadow of turning; but He is the same to-day, yesterday and forever."

We feel so absolutely sure of the stability of the laws governing the solar system that we never imagine what would happen should the sun fail to rise on the morrow, or the light and heat should fail for an instant.

In geology we see the same laws operating as in the solar system and astronomical world. Gravitation holds the materials of the earth, the outer crust and inner formations in firm relations, and securely binds them in their spheres to function in the benign purpose of sustaining

life. The outer crust and cooler surface is adapted and suited for the habitation of man while the inner parts are found, as we bore into the depths of the earth, to be of a warmer character uncongenial to life, but serving the purpose for support of the outer crust and probably furnishing the necessary supplementary heat to sustain life on the earth.

Humanity has attained to such confidence in the stability of these God-given laws that no question is asked as to their stability and permanency.

The Stability of Law as related to vegetation, heredity of animal life and all those laws relating to the propagation of life, is seen in all nature. The Biblical statement of this fact cannot be improved upon: "Let the earth bring forth living creatures after his kind." This follows with a persistency most marvelous. It is said that a grain of corn, after passing through an animal and running the gauntlet of all the adverse conditions of such ordeal, remaining whole, will germinate and produce as well as another untried in the furnace of such test.

In the animal creation we see the permanency of laws manifested in the laws of heredity; the monkey will produce monkey and not man.

But the law of intervention is also persistent, other influences coming in may produce another kind of monkey. The horse, with all persistence, without intervening influences, will produce a horse, but certain other influences may cause another kind of horse to be produced.

Jacob's law of intervention, such as stripped or barked trees, according to Biblical account may so influence the strain of cattle or flock as to mark them with stripes. Also the various strains and crosses of animals speak of the persistent law of influence operating among animal creation.

But like, uninfluenced, may be expected to produce like.

The law of permanency may be seen in the operation of farm and factory.

The farmer may reasonably expect to reap a crop when he plants the seed and like unto the seed planted. It does not evaporate.

The builder of house, factory, railroad or mill may reasonably expect to have the use of them as they do not decay immediately.

In other words the Biblical statement is apropos: "God is not mocked, whatsoever a man soweth that shall he also reap."

In the laws of chemistry, mathematics, electricity and dynamics this law of stability maintains throughout. As illustration, we can see in the science of mathematics how the finely adjusted laws of numbers are contributing to the welfare of man. As we study the vast systems of the solar world their almost incalculable distances, their movements in relation to one another, and their adaptations to our needs of life, we find the laws of numbers outstanding—and closely interwoven with the functioning of these bodies in their relations and influences upon one another; yet we never pause to ask: Are they reliable as helps in understanding these vast creations?

Mathematics is called an exact science: "Figures do not lie" is a trite saying. By the law of numbers we estimate the time and length of the various seasons, their relation to the various periods of the year, and the ever recurring night and day. In fact, without these marks of events, we would not have any calculation of time, for time is that which marks the succession of events. This conception of time affords us a distinction between time

and eternity. We calculate time by the use of numbers: Eternity cannot be calculated.

One great astronomer, commenting on the wonderful conjunction of Mars and Jupiter on November 27th, 1921, says: "The conjunction occurred exactly on time as predicted four years before. But think what the mathematicians had to know absolutely to predict this conjunction. The planets are all moving on ellipses, not circles, and each perturbs all the others and changing velocities and directions. All complex equations were solved and the conjunction came on time. These works make those who solved the problems transcendent."

These wonderful calculations can be made by man only as he is enabled to use the God-given laws found in the realm of mathematics and provided in the Stability of Law.

As we study the history of numbers and their relation to the welfare of man, we find that, concurrent with history, runs this science of exact calculations. The early Egyptian astrologers, as well as those of Assyrian and Chinese origin, were learned in the use of numbers and made use of them in their calculations marking the movements of the heavenly bodies. The Egyptians evidently used these laws in the building of the pyramids and in every important work requiring exactness. Numbers were necessary to build with precision. In the earliest Hebrew history numbers were used as all the writings would indicate. In fact with the dawn of history man resorted to numbers in marking transitions, years and times.

In chemistry and physics, in calculations and preparations of formulae indicating proportions, and combinations made in the movements and transitions of changing

substance, this exact science of numbers is outstanding as a necessary handmaid to these sciences.

In industrial, commercial, social and political life, the feature of permanency is calculated to insure peace and comfort and always inspires confidence and assurance to all parties concerned.

All of our improvements in nation, state, city or individual capacity, permanency is the foundation of confidence. Our railroads, great transportation systems, subways and tunnels, building projects, constitutions and laws, all speak of and stand upon the Stability of Law. Any fantastic or effervescent or unstable or shifting formula or plan is inconsistent with the highest purposes of God and man.

The Great Teacher on a certain occasion called attention to mark the distinction between the stable and unstable in his parable of the house built upon the rock. The wise man builds for eternity upon the rock, the stable foundation for permanency.

The Stability of Law as related to God always inspires men to the highest effort and accomplishment and an optimism unfailing. But the fearful and doubtful man is likened unto the waves of the sea ever changing and unsettled.

The desire for Stability in Law appears to be inherent in man, and faith in the permanency of law is the foundation of all movements and action looking to the improvement of humanity. "According to your faith it shall be." If we had no faith in the laws controlling the solar system, the laws of heredity, the laws of animal and vegetable life and in our friends and family, the path of life would certainly be a rough one, full of doubt and fear. In fact, faith in the stability of these God-given laws is necessary to our existence, propagation and

friendships. All family relations and all social, industrial and commercial relations must bear the mark of confidence in the Stability of Law. So, in all our observations for the goodness of God, we see outstanding this law of permanency upon which we build our lives and character; and, as this confidence grows by experience and observation and we study the goodness of God in all creation, we will find, as the Hebrew writer remarks in the 107th Psalm, last verse:

“Whoso is wise he will observe these things, and he shall know of the loving-kindness of God.”

The furniture of the earth and of the heavens may change from style to style, but the fundamental properties of its constituents remain, as Thomson says, and quotes from Sir Clerk Maxwell, “Though in the course of ages catastrophes have occurred and may yet occur in the heavens, though ancient systems may be dissolved and new systems evolved out of the ruins the molecules, the foundation stones of the universe, remain unbroken, and unworn. They continue this day as they were created—perfect in number and measure and weight.” We see then that man can make or change the form of combination, but he cannot create.

The persistency and stability of law is manifest in the wonderful economy of nature or law of conservation of energy. That energy which disappears in one form reappears in another form has been found to be universally true. As wood or coal burns we find the results in light and heat. We may change water into the gases hydrogen and oxygen, and from these gases we may obtain energy for moving machinery, and the products of the manufacturing process may again be changed into some form of energy, say electricity, which may be stored and used for moving trains or ringing a door-bell.

Scientists tell us that energy is indispensable to life, and that as it is humanly impossible to destroy a particle of matter so it is impossible to destroy energy. So we can be positively sure, in all our calculations from proven formulae, that the changing forms of matter will result in some form of energy, and likewise the energy may be changed into matter of various shapes and forms. In other words, matter and energy are interchangeable and yet indestructible. These facts and processes are wonderful blessings to mankind. In fact life could not continue without matter and energy and their processes of change. The food which one eats must be changed into energy by the processes of digestion and assimilation; and the resultant energy may take many forms of action at the volition of the king in the palace.

TOPICAL SUGGESTIONS:

1. Stability of law is manifest in the movement of the heavenly bodies. It challenges our admiration and gives confidence in all calculations.
2. In geology, through the laws of gravitation, we see stability and permanence most marvelous.
3. Vegetable life, like producing like; but influenced by interference.
4. Laws of heredity, family associations and friendships.
5. Mathematical calculations and laws of the solar system speak of stability.
6. The findings of chemistry and physics as well as in practically all the sciences stability must mark progress and the general features of calculations.
7. The farmer and business man needs stability to insure success. "Whatsoever a man soweth that shall he also reap." Labor must have promise of reaping.
8. Faith developed by stability of law, and character built by confidence.

XIII

THE HIGHER IDEALS

HAVING treated the question of Co-operation as it works out among men we must look further and consider the Ideals of men.

The spirit of co-operation inspired by the Higher Ideals stands out so prominently and works out so beautifully that we feel impelled to note other great purposes served by these Ideals which have contributed so much good to mankind.

As we look through the pages of history and note the progress of man as he has advanced from one stage of civilization to higher stages, we see that only as he has been impelled by the more worthy motives and ideals in his activities has the progress been marked for good. The Higher Ideals inspiring the motives and lives of men draw them into those activities which spell for advancement in civilization. As one civilization is built upon the one preceding and our lines have fallen to us in pleasant places we must look into the ideals which impelled our ancestors to action. Many mistakes have been made, but as one of our country's famous men said: "The man who does things makes some mistakes but the man who does nothing makes no mistakes."

The ideals set forth in the Declaration of Independence give us a clue to the visions of life and purpose of the founders of our Republic. Divine providence and altruistic purpose are mentioned in the first paragraph of the Declaration—the conception of democracy as purposed

sets a new standard of values upon life and property as well as upon the relations of men—men are declared to be born free and equal. With recognition of Divine Providence and with the ideals of justice the people of the democracy pledged their lives each to other to carry out the purposes of the declaration. So we see implanted in the first concept of our government the seeds of responsibility to God and the altruistic purpose of service to men.

These ideals have prompted and served our fathers in many of their following declarations. And as these ideals have been wrought out in law and authority our nation has made advance and won the admiration of all nations. One ideal, and probably the most notable, was that set forth by our first President, George Washington, when he took the oath of office and placed his hand upon Micah, 6th chapter and 8th verse: "What doth the Lord require of thee, but to do justly and to love mercy and to walk humbly with thy God."

The same ideals were approved and set forth when our President Warren G. Harding took the oath of office and placed his hand upon the same passage of Scripture. Abraham Lincoln in his second inaugural address voices the same sentiment when he made the declaration and uttered those memorable words: "With malice towards none and charity for all, with firmness in the right as God gives us to see the right, let us strive on to finish the work we are in, to bind up the nation's wounds," etc. Also in his last public address he said: "He from whom all blessings flow must not be forgotten. A call for a national thanksgiving is being prepared."

These ideals and purposes actuating our fathers and their children have helped to form the fiber of the American character which finds expression in the laws of our

democracy which in turn contribute to our welfare as a nation and as individuals.

As we review the lives of men and nations, we see ideals crystallized and focussed at some point or combination of events in their lives. When Lincoln, as a young man, saw a little slave girl auctioned off on the auction block in New Orleans he remarked, "If I ever get a chance to hit that thing I will hit it hard." And he did.

Far back in Roman history we see Catiline as he appeals to his people and the patrician class pointing out the follies, crime and lewdness of that great city, saying: "Rome is no more like Rome than the foul dungeon is like the glorious sky; what is she now, degenerate, gross, defiled, the tainted haunt, the gorged receptacle of every slave and vagabond of the earth, a mighty grave which luxury has dug to rid the other realms of pestilence."

What scathing rebuke cast at the same city by the great apostle, Paul, in his letter to the Romans; listen: "Being filled with all unrighteousness, wickedness, covetousness, maliciousness, full of envy, murders, debate, strife, deceit, malignity, whisperers, backbiters, haters of God. Without understanding, implacable, covenant breakers, without natural affection, unmerciful." This scathing denunciation pointed out the opposite and higher ideals to be followed at a time when civilization was tottering to its fall. It was a warning to men and nations of all times to seek the higher ideals of life, and has pointed men to higher visions of life. These signals along the road were evidently given as warnings of danger of the precipice or rapids below. And all through the ages, lights have burst forth and the torch of life has been held aloft by men who sensed the danger and held forth the higher ideals as a beacon light.

Centuries later the higher ideals of civilization were

held aloft by such men as Edmund Burke, Fox, Pitt and Wilberforce. Listen to Burke as he denounced the tyranny of his country in trying to force the American Colonies into submission, as he stands in the Parliament before his countrymen: "Since I had the honour, I should say the dishonour, of sitting in this house, I have been witness to many strange, many infamous transactions; what can be your intention in attacking all honour and virtue? Do you mean to drag all men to a level with yourselves and extirpate all honour and independence? Perhaps you imagine a vote will settle the whole controversy. Alas, you are not aware that the manner in which your vote was procured is a secret to no man. Listen, for if you are not totally callous, if your consciences are not seared, I will speak daggers to your souls and wake to all the hell of guilty recollection, I'll follow you with whips and strings through every maze of your unexampled turpitude and plant thorns under the rose of ministerial approbation. You have flagrantly violated justice and laws of the land, and opened a door for anarchy and confusion. After assuming an arbitrary dominion over law and justice, you issue orders, warrants and proclamations against every opponent and send as prisoners to your 'Bastille' all those who have the courage and virtue to defend the honour of their country. It is in vain that you hope by fear and terror to extinguish the native British fires; the more sacrifices, the more martyrs you make, the more numerous the sons of liberty will become. They will multiply like the hydra and hurl vengeance upon your heads. That I may not be a witness to these monstrous proceedings I shall leave the house, and I doubt not but that every honest man, every independent man, every friend to England will follow me. These walls are un-

holy, baleful, deadly, as long as a prostitute majority holds the bolt of parliamentary power and hurl their vengeance only upon the virtuous. To yourself, therefore, I consign you. Enjoy your pandemonium."

The same spirit of defy was marked in the great speech of Patrick Henry when, at a time that tried men's souls, he exclaimed: "Give me liberty or give me death."

Other great men throughout the ages have set high standards by word and deed. These great ideals held aloft by men of firm convictions and holy purpose at times when tyrants flourished and states seethed in corruption, have held civilization in its upward path of progress as the pilot may be guided by the stars of light. These, holding the torch high, have led the way for us.

As ideals apply in political relationships, so they may be observed in all social, industrial and commercial relations and aspirations. We may note the plans of co-operation in the various schemes of industrial life and social service organizations, in the Red Cross, Associated Charities, etc.

Be fair to the children, the boys and girls of to-day, upon whom the future of our country and the world depend. Give them the right perspective of life, the higher ideals of Americanism to guide them in all relationships. Otherwise the road will be difficult and the path unsafe, for their responsibilities will be greater and the keenness of vision more necessary as the light is lifting the veil of darkness throughout the world. The man with the ox-cart and surry with old dobbin, tugging at traces, was safe on the rough country roads of one hundred years ago, but upon the modern highway, amid speeding machines, he has no place.

In years past, men with feet unsteady and mind cloudy

and, misty from alcohol, could manage in some way to get along, but to-day such men have become *passee* and their places are taken by men of clear vision and steady hand. They have no more place in the economy of God's plans for His universe. Even the fool can see the folly of such a life in this age.

In commercial life formerly men could be endured with mind thus clouded, but to-day the merchant passing life in this way is a back number, only waiting for the obsequies. It is an electrical age, requiring quick action of body, mind and character, as we may differentiate character as a combination of mind and spirit which give expression to life.

As in commercial, so in industrial life there is very little place for the man in responsible positions who does not sense the needs of the times. In handling the expensive, delicate and intricate machinery of mill or factory the whole man with body and nerve steady, mind clear and purpose sure, must be there to-day. Under the liability and compensation laws the man of unsteady habits of mind or body is not a good risk and cannot be placed in positions of responsibility. Business and professional men everywhere are looking for clean men of high ideals and character to fill these places.

The marks of character are outstanding in the habits of life. The cigarette habit, profanity, disrespect for womanhood, speaking lightly of the higher things of life, and the propensity to looseness in speech and slouchy habits, lack of consideration for others, all these mark the character to be shunned,—in the hope of helping to the higher standards of life as seen in cleanness, courtesy, kindness and good-will.

These are the greatest assets in business and social life, as well as in domestic and political life. They can-

not be measured by mathematical calculation. These values can only be estimated as they find a place in the economy of God's purpose, and as these higher ideals fit into His great plan in working the highest good for humanity.

When one aspires for The Higher Ideals he can find a means of cultivation through his associations and environment. We grow into the likeness of the character we admire and we may seek in our friendships the characters which inspire us to higher ideals.

"Hitch your wagon to a star" is a kind suggestion which would stimulate us in our aspirations and lead us to mingle in life's purpose with those who are holding the torch a little higher. These companionships may be found in the character of the books we read and the ideals approved by their author.

The attitude which we assume to life, whether that of optimism which brushes away the fog, or that of pessimism which clouds the path, always reflects itself in character and action. The good men who inspire us and those who have tried life in its various phases may write a proverb or enclose in a word motto a truth and thought to warn or inspire us, as their life findings may suggest.

In these laws of association and environment we can see the wise provision made by our Great Creator for character building, as men may aspire to the Higher Ideals.

THE PRESENT CRISIS

(Excerpt)

When a deed is done for Freedom,
Through the broad earth's aching breast
Runs a thrill of joy prophetic,
Trembling on from east to west.
For mankind is one in spirit,
And an instinct bears along

Round the earth's electric circle
The swift flash of right or wrong;

Whether conscious or unconscious
Yet humanity's vast frame
Through its ocean sundered fibres
Feels the gush of joy or shame;—

Once to every man and nation
Comes the moment to decide,
In the strife of Truth with Falsehood
For the good or evil side;

Some great cause, God's new Messiah,
Offering each the bloom or blight
Parts the goats upon the left hand
And the sheep upon the right,
And the choice goes by forever
'Twixt the darkness and the light.

Careless seems the great Avenger,
History's pages but record,
One death-grapple in the darkness
'Twixt old systems and the Word;

Truth forever on the scaffold,
Wrong forever on the throne,—
Yet the scaffold sways the future,
And behind the dim unknown,
Standeth God within the shadow,
Keeping watch above His own.

See we dimly in the present
What is small and what is great,
Slow of faith how weak an arm may
Turn the iron helm of fate.

But the soul is still oracular;
Amid the market's din
"They enslave their children's children
Who make compromise with sin."

'Tis as easy to be heroes,
 As to sit the idle slaves,
 Of a legendary virtue,
 Carved upon our fathers' graves,
 Worshippers of light ancestral,
 Make the present light a crime.

New occasions teach new duties,
 Time makes ancient good uncouth,
 They must upward still, and onward
 Who would keep abreast of Truth.

Lo, before us gleam our camp-fires!
 We ourselves must pilgrims be;
 Launch our Mayflower, and steer boldly
 Through the desperate winter sea.

JAMES RUSSELL LOWELL.

TOPICAL SUGGESTIONS:

1. Higher ideals inspire co-operation and advance in civilization, as shown in history.
2. The Declaration of Independence, and the ideals therein proclaimed.
3. Washington, Lincoln, and other presidents have held aloft the torch and blazed the way by pointing out higher ideals.
4. Roman History—Catiline to his friends, and St. Paul denounced the wickedness of the age.
5. Wilberforce, Pitt, Fox and Burke in their speeches spread the light of liberty.
6. Be fair to the children—Prepare them to meet the conditions and requirements of this age, in social, industrial, and political life.
7. Higher ideals, great assets in associations of life; not measured by mathematical calculations.
8. Excerpt from "The Present Crisis," by James Russell Lowell.

XIV

TIME AND PLACE

IN our study of the Creator's wise provision for man we must observe time and place as well worthy of consideration. Some one has said that time cannot be defined, and, like electricity, can only be described as it figures in the life of man, as we may say this or that shows the marks of time.

So time may be considered as that which marks the succession of events. Place may be featured as that which may be differentiated from every other place in the universe.

As time is swallowed up in eternity, so place is swallowed up in space, or as a very learned university Doctor would say: "In the unfathomable universe."

So we may consider time as an integral part of eternity for use by man to measure the succession of events. By time we mark the points in history as before or after certain other time or event. We mark the beginning of history as 4004 years B. C., and succeeding events as following at a certain point of time thereafter, or as related to another point of time called A. D. This point of time is so commonly mentioned upon our stationery, in our commercial, industrial, educational and political documents that we scarcely stop to consider its meaning.

In considering the periods of time as related to the great creations of the universe, we speak in epochs of time rather than in years, or as the age marked by the various strata and fossils of the earth, but "in the be-

ginning" may mean the beginning of all time, inclusive of the epochs or ages of creation. But when man began to function as a creature marked by God's care and consideration as given in Biblical chronology, we take up the events as marked in time by years; and the point in space at which man began to function at a certain time at a certain place.

So our histories are the record of events as they transpired at a given time at a certain place. As the outstanding events and pivotal points in history have been marked by crises, we find that many of these are marked by wars at a certain time at a certain place. These points, as they are brought to our attention and are placed in memory's halls, either to encourage us to higher effort with higher ideals, pushing us forward with nobler and altruistic purpose, or they may cause us to lapse back into pessimism as they pass in review before our mental vision.

The great events of history marked by chivalry, courage and high ideals appear to enthuse us with a passion for like courage and endurance. As when the world's civilization was at stake, Charlemagne rolled back the Moors at the Pyrenees, and Charles Martel forced back the Saracens (732 B. C.) and at Tours, thus saving Europe for modern civilization. Or as we see Britain's unflinching courage and skill marked by the naval victory at Trafalgar by Lord Nelson. These fill us with higher and nobler aspirations; they also lend to our memories facts of experience and observation from which we plan our future course.

As we place the searchlight of memory upon the pivotal points in European history and mark how civilization, caught at times between the pincers of hostile forces and about to be plunged into an abyss of utter dark-

ness, we marvel at the timely deliverance when men fought with back against the wall and prayed.

The Frenchmen will always remember the great battles of the late World War and tell their children of their great deliverance at the battles of the Marne, at Chateau-Thierry, at Belleau Wood, at the Argonne, and the timely coming of Uncle Sam's forces from overseas. How the children and grandchildren of Britain's fold will delight to hear of the valour and chivalry of the British and Canadian forces at Ypres and other fields at other times and places. Likewise, the Italian fireside will echo with the stories of bravery of General Diaz and his army at the River Piave. The children of Jewish parentage will always delight to hear of the deliverance of the Hebrew people from the Egyptians, and the crossing of the Red Sea; about David and his single-handed victory over the great Goliath; of Queen Esther in her wonderful fortitude, saving the race and nation at a certain time and place.

And, as we approach American history, our children will always delight to hear of the bravery and chivalry of their ancestors as we tell of Bunker Hill, Lexington, Yorktown, Washington crossing the Delaware, and the winter at Valley Forge, and as we come on down and note the great battles of the Civil War, the battle above the clouds on the Lookout Mountain, and the battle of Gettysburg and peace at Appomattox. Also as during the Spanish-American War, the wonderful morning when Dewey with his brave men and small fleet steamed into Manila Bay and placed the Philippines under the aegis of the American flag.

Although the past has been replete with the wars and battles marking time and place, yet we can read between the lines the great altruistic motive actuating many

warriors in their loyalty to the higher ideals and desire for world peace. While the historian has placed special emphasis on these outstanding crises in the affairs of men in the past, yet we can see, as we peer into the kaleidoscopic movements of the race, many great accomplishments along the lines of peace which is now appealing to the nations.

Through the outstanding arts of peace which have pushed the world forward to better things, we note the great inventions of the ages. Guttenberg, Watt, Edison, Wright Brothers, and the many other men of genius in the industrial lines have brought out the power of letters, steam, electricity, and along the lines of chemical combinations, so that war must hereafter be crowded out of man's formula for the great combination necessary for the world's advancement. War has become such a waste in the economy of man's relationships, and has at last become so distasteful and so expensive in life and property, that other means must necessarily be found for settlement of all differences between nations as between individuals.

Although we have lauded men in their great accomplishments in wars of the past, and give all honour to those heroes to-day, may we not hope that as much praise shall be in store for those who are so persistently working out formulae for prevention of wars? The pivotal points in the histories of the future will probably be marked by the peace conferences, the great and higher ideals held up to the children of the world, the advances in education and altruistic motives which are now actuating man to the highest and noblest in life. The men of valour will be marked by their contributions to the arts of peace. May it be the boast of all men that their heroes of peace, courtesy, and good-will hold a place in

their memory not below that of the warriors of the past, but filling a niche in the temple of fame, equal to and alongside of the highest and noblest. May it be the boast that these men and women were born here, at such a time and in this place.

As it may be pointed out in our chapter on Higher Ideals, we can see that these men with the environment, education and association leading up to such lives, enrich our civilization. They are marked characters to be emulated by our people in the crises of life. They must be given a place in history marked by time and place, as contributing to the well-being of mankind.

We cannot know the material world except through our conceptions and knowledge of the relations of objects in time and place.

As Dr. Betts says: "The material world which we enter through the gateway of the senses is more marvelous than any fairy world created by the fancy of story tellers for it contains the elements of all they have conceived and much more besides. It is more marvelous than any structure planned and executed by the mind of man, for all the wonders and beauties of the Coliseum or St. Peter's existed in nature before they were discovered by the architect, and thrown together in those magnificent structures. The material advancement of civilization has been the discovery of the objects, forces and laws of nature and their use in inventions serviceable to man. All forces and laws of nature were discovered only as they made manifest through objects in the material world." Without conceptions of time and place, which enter into all relations of life, there would be no history, no registration of facts to be remembered, therefore no advancement in civilization.

Time and place of birth, the outstanding crises and

events of life, add zest to life and give clearer conceptions in all these relations. They are outstanding as showing for us the benign purpose of our Creator, in working out the highest good.

The historian registers the outstanding events in life marked by time and place, and places before our vision in word pictures the crises of nations and individuals, so history must be accorded a large place in our consideration of life's benefits.

One writer has said: "Wonderful is a good book of history. From that book come all great men that inspire us, all great criminals that warn us. Nothing is more stimulating to ambition, more worthy of eager youth and self-respecting old age. Read good books, good books of history especially"—which record events and crises of life in time and place.

It has been said that "the accuracy of precepts depend on experience." Experience comes from memory or record of events as they may occur at a certain time and at a certain place. As Betts says, "In the perception of space we must come to perceive distance, direction, size and form. Probably the most fundamental part of our idea of time is progression or change, without which there could be no progress or forward advance in any line."

For our convenience that our minds may more readily grasp duration of time we bring into our vision mathematical calculations, dividing time into years, months, weeks, days, that events may be given a distinct place and set time in our historical records. Without this perception of time and place all historical fact could not remain clearly distinct, and memory would be blotted out in the mottled conglomeration of a meaningless world. In fact all thinking depends upon experiences and experience must recognize places, events as distinct from

other events and time within which events occur. "Nothing can enter our present experience which does not link itself to something in your past experience," in time and place.

TOPICAL SUGGESTIONS:

1. Time an integral part of eternity measured only by succession of events. Place marks a space in the unfathomable universe.

2. Histories record events occurring at a certain time and place; by these marks or conceptions we record them in our memories.

3. Great events of history are featured in this way and may point us to higher ideals. They are often the pivotal points in the lives of nations.

4. The great battles of the great world war, in American history, in national crises.

5. The accomplishments of peace and the marked advance in peace methods.

6. Without conceptions of time and place there could be no history, and no advance in civilization.

7. These historical facts add zest to life, aspiration to national and individual vision.

8. Recommendation to study history which inspires us and at the same time warns us.

PART IV
Some Arts of Life

XV

ARTICULATE SPEECH AND WRITTEN LANGUAGE

IN considering the many powers and gifts to man showing the goodness of God we find the power of articulate speech stands out, contributing largely to his welfare.

To add to the social, domestic, commercial, political and industrial life of man, this power of speech as a means of communication has been one of the outstanding features marking the progress of the race. This power, together with the written signs or letters, is one of the manifestations of the goodness of God in His gifts to man.

From the dawn of history and the most remote traditions of man, we see this gift in use as a means of communication called language. Man through the ages has been jealous of this power as noted in the effort of parents to teach their children. It comes as a concomitant of the power to walk uprightly. Children are taught these two powers as soon as the mind and physical body can receive instruction. And great is the joy of the parents when the little one can show his power of speech and makes sure that this gift is his own. What a handicap when it is lacking! It is so keenly needed and so highly prized among men, and so intimately associated with man's activities that it appears to be kin to the five senses. So, in passing, we would suggest that language and power to walk upright with ease, differentiating man

from the lower animals, are two of the wonderful manifestations of the goodness of God to mankind.

In promoting this great power of speech we spend billions for the education of our children in teaching them to speak the language correctly; the lack of such education stamps and marks one as lacking in all the associations and activities of life.

Then, the power of translation of language into type or letter sounds, so that communication may be had by means of printed or written page, is an advance marked in the progress of the race toward the higher things of life. The invention of movable type by Guttenberg marked another gift to man for expediting communication by means of the printed page, so that education could become more general. The thoughts of man are preserved, as it were, in form of books or printed page for use at any time and to be opened at his pleasure. Just as the song of the singer is recorded and preserved for reproduction upon the record of the phonograph at any time and in any place, so books may be likened to these records.

So pronounced and so necessary to man's welfare has this gift become that all peoples with any pretension to civilization have adopted a system of rules or laws of speech known as Grammar, showing the methods by which the language may be spoken correctly.

Unlike the senses, the ability to talk, walk and think methodically and correctly requires much training and special education. Many men never acquire the gift of speech to a degree that they can stand before an audience with poise, confidence and ability to present a subject without embarrassment.

The power of articulate speech has filled a large place in history. When great principles have been at stake and

the life of nations have been in the balance, men with keener vision thus gifted, so moved the peoples by eloquent appeal and clear presentation of fact, that monarch and populace alike have trembled and quaked before them.

In early Roman and Grecian history, before the invention of movable type, the orators such as Mark Antony, Demosthenes and others could move the populace to dangerous degrees of fury, and kings feared and trembled before their appeals.

Also note Paul's wonderful pleadings before Felix and Drusilla; "Felix trembled," and again his wonderful defence before King Agrippa and his great oration on Mars Hill.

In later times, and during the period of our Revolutionary War, the speeches of Pitt, Edmund Burke and others in the House of Parliament in England made King George III quake on his throne. They aroused the people of Great Britain to the injustice of their cause that enthusiasm was dwarfed and their ardour checked in the prosecution of the war against the colonies. As a result England was required to employ Hessian mercenaries to help her cause and fight her battles.

And to-day we read with great delight the great orations of our fathers and the statesmen of our country as they plead the cause of our nation in times of stress and strain. We never tire of reading and hearing Lincoln's Gettysburg address or Patrick Henry's note of defiance, and the utterances of others as they voiced their sentiment in no uncertain tones in times when the opinions of men were challenged.

Again we may consider this gift in its relation to song as showing its great contribution to the welfare of man. From the earliest times the Hebrew people were accus-

tomed to chant their praise of Jehovah and send forth their songs of Thanksgiving in articulate speech, as in Miriam's song of praise, the song of Moses in his expressions of praise for deliverance. We see it in the many Psalms of David who sponsored the cause of Jehovah on throne and battle-field.

In the life of church, in worship, the Psalms and songs voiced in unison move the people to high spirit of exaltation. Women and children alike unite in the spirit of reverence and the higher and nobler sentiments of life as they join in worship and voice their aspirations and hopes in song.

In all gatherings of social and political character song also fills a large part of the service and program. The articulated words set to music, accompanied by instruments of various kinds, mark a phase of articulate speech leading to exhilaration and higher moral ideals.

In public appeal, in presenting the higher ideals of life and character from church pulpit or from political rostrum to influence people to action or observance of any program, the power of persuasion can be emphasized in address or oration by personality and appropriate gesture, making the appeal more effective.

In domestic, industrial and commercial life this gift is almost incalculable in that it supplies and facilitates all means of communication, expedites expression and purpose, and lubricates the wheels of action. The training of children in the home or school, church or business world would slow down, the movements halt, and life would be dwarfed without this gift so essential to effective expression. The wheels of industry would move very slowly were it not for the power of men to exchange ideas and plan through speech. The building of the Tower of Babel and confusion of tongues, as ex-

pressed by the Biblical writer, might be considered a fair illustration of what would happen without the power of articulate speech.

Also in commercial life, so highly organized to suit the necessities of man, this gift figures largely in facilitating business. Men talk things over, exchange ideas, counter and parry as they move among their fellow men acquiring information, preparing for purchase or sale of their goods and products. Thus we see that for the advancement of civilization, for education, for commercial and industrial, religious and political purpose, this gift must be cherished, preserved and be cultivated as it may lead us on to the higher methods of communication; shall we call it telepathy? To fix an idea or plan within the mind a formula of speech is almost unfailing.

Since speech has been translated into the printed page and preserved in book form and magazine, we may look to see how these have contributed to the welfare of mankind.

The newspapers of to-day, some ponderous in the extreme, the magazines, periodicals and books, all issued with a view to enlighten in some line of education or phase of life, serve a great purpose in broadening man's horizon along all lines. One man at the age of ninety-eight remarks that reading newspapers every day had contributed to his longevity. He had taken five papers every day for many years, and read them; so he recommended the reading of papers for stimulating the mind and adding to length of life.

So along all lines of life in the home amid the cares of domestic life, in teaching baby to talk and sing, and in industrial life in expediting the use of machinery by communication, and in commercial life, we see the won-

derful contribution to man in the gift of articulate speech and expression by printed or written page.

The great orators, poets, historical writers, travellers and explorers, all can resort to the printed page in magazine or book form to let the world know of their thoughts and findings in life.

How the burning words of Portia, as painted by Shakespeare in his "Merchant of Venice," have cut their way into the hearts of men through the centuries as she demanded of Shylock that if the pound of flesh be taken it must be nearest the heart without shedding a drop of blood. How her words pierce the hearts of the extortioners and the greedy as they would demand the pound of flesh.

These, with other great teachings of Shakespeare, inspire our lives to-day. The great lessons of the poets and historians framed in phrases and thought to suit are here preserved as a foundation for our thought and inspiration.

Figuratively speaking, we dwell in cities that we did not build, so to speak, and enjoy the fruits of labours for which we did not sweat.

"Ours is a goodly heritage" through articulate speech and written language. We live through the moods, the heartburnings, the longings, regrets and ecstasies of other years and of other peoples as we review their writings and live their lives in thought and mood, make companions of men and women whose characters we admire. All these things are for the purpose of lifting us to higher conceptions of life, duty and obligation, that we may acquire a clearer appreciation of the beautiful, the true and the good.

A prominent writer says, "Thought itself is impossible without words." And there is no thought without

language, spoken, written or some other expression. It may be by the face, action, attitude or a combination of expressions. Thought itself begets action and expression in language or life. But language spoken or written is the great means of transmission of thought.

J. Arthur Thomson says: "Man stands apart from animals in his power of building up general ideas and of using them in the guidance of his behaviour and conduct. Some animals have words, but man has language (Logos). Some animals show evidence of perceptual inference, but man often goes beyond this to conceptual inference (reason)."

TOPICAL SUGGESTIONS:

1. Power of speech necessary in social, domestic and industrial relations of life, as shown by history.
2. Billions of dollars spent on education to foster language and speech. The importance shown in efforts upon the infant to foster speech.
3. Language universal in civilized society.
4. Power of oratory upon civilization. Noted orators.
5. Effect of oratory upon ideals of men marking pivotal points in history.
6. This gift in relation to song, religious gatherings and political life.
7. Facilitates business and movements in all relations of life.
8. Newspapers, magazines and writings of leading men. Influence of such men as Shakespeare and poets in shaping the sentiment and ideals of peoples.

XVI

MUSIC AND SONG

IN the laws of music, classified as one of the fine arts, we find a contribution to the welfare of mankind showing the goodness and wisdom of God.

From earliest history, and among all peoples, music has furnished much of the great pleasure and has entered into most of the joys of individual life, also in congregational gatherings both for recreational and religious purposes.

From the dawn of creation music has enraptured the soul of life with her symphonies. As the poet, when first aroused by the beauties of God's creations and being lifted upon the wings of inspiration, he pictured the time when "The Morning Stars sang together and the sons of God shouted for joy."

The people of earliest times in their homes, at firesides and community gatherings, sang the praises of the Creator and His wonderful goodness to the children of men.

The history of Israel is marked by its beautiful conceptions in poetic songs as seen in the song of Miriam and the inspirational notes of the Psalmists as they chant their lays in praise and song. In the songs of Solomon, in the spiritual conceptions of David and the seers of old when they struck their prophetic lyres, they rose to their highest and best as they voiced their praises under the spell of sacred music. In earliest Babylonian history we find the cornet, flute, harp and instruments of solemn

sound, when Nebuchadnezzar and his retinue demanded of all men that they bow down before the image which he, "Nebuchadnezzar the King had set up." Here also we find, mingled with the sordid and low spiritual life, the highest and most exalted conception of duty and obligation to be decided at the sound of the musical instruments as noted in the history of "Daniel."

Among the Grecians in the mythological legends we find Pan piping to the woodland fairies and Ulysses filling the ears of his ship crew and tying himself to the mast in order to keep from falling under the spell of siren songs.

The Indian chants his war song as he prepares for the attack; the negro sings or hums his melody as he labours under the midday sun in cotton fields. It is said that the Filipinos, who are known as a musical people, will increase their output of production in the fields twenty per cent when working under the spell of music and song.

Shakespeare has said: "The man who has no music in himself nor is moved with concord of sweet sounds is fit for treason, stratagem and spoils." The Chinese with their crude tom-tom and incantations presume to raise the spirits by their enchantments. When the martial strains of the "Marseillaise" reaches the Frenchman's ear, or when the Britain's veins swell to the tune of "God Save the King," or the American's vision is inspired by the "Star-Spangled Banner," men are moved to heroic deeds and martial valour begotten as under the spell of a muse divine. In our religious and patriotic celebrations, in church and state, men and women and children rise to their highest conception of duty and obligation under the swelling emotions of choral or individual song. The souls and minds of men respond as

if attuned by chords of sympathy to the harmonies lying back and under the musician's charm.

Another writer, commenting upon the art of music, says: "This child possesses one radiant attribute which signalizes it from all its sisters (sculpture, painting and architecture). It floats on the air, it touches not the earth with its feet. It is well-nigh incorporeal. Its material is transparent. It is sonorous air. It is almost nature itself. It is free."—FERRUCCIO BUSONI.

The same writer, comparing music with the above arts, says: "Have you ever noticed how people gaze open-mouthed at the brilliant illumination of a hall? They never do so at the million-fold brighter sunshine of noonday."

The jazz band or the organ-grinder with monkey need only to sound the first note to arouse the sleeping or playful emotions of children who respond with eager feet and joyful heart to the call of Orpheus.

The croaking of the frog, the neighing of the horse, the mooing of the cow, the humming of the bee, and the crickets and katydid with their peculiar notes, as well as the beautiful whistlings of whippoorwill, together with the sweet carols of the canary or mocking-bird, all call us to consider His goodness as the music of the world moves men to higher and nobler activities and ideals.

One writer, sounding the praises of music, says: "Song is the one expression for all occasions. It comforts the saddest, soothes the ferocious, adds zest to the nomination or home run. It gives joy, it brings power, it lifts our heels and carries them through intricate steps. It sends our thoughts wandering, we forget the limitations that bind us to one personality. We are Pagliacci, Lohengrin, Carmen. We are the waves that beat against the salt cliffs, the clatter of cavalry, languor of the

Orient, gleaners under autumn skies. We are quick with the radiance of love, of sacrifice, of eternity.

Music leaves us better and happier; we forget our bank accounts if we have them, or we may be as happy without them under the spell of the muse of music. We sing, we pray, we laugh, we eat and drink and play under the siren notes. When in ecstasies the bard would give vent to his highest inspiration or poetic vision, the lyre and song may lend aid to his swelling emotions.

Music may be called the gospel of harmony in variety. The Christmas carol, the halleluiahs chorus, all quicken our thoughts and sympathies as they bring to our minds in song and melody the memories of the Christmas-tide.

When Longfellow desired to paint a poetic picture of freedom from the burdens of life, he said:

“And the nights shall be filled with music,
And the cares that infest the day
Shall fold their tents like the Arabs,
And as silently steal away.”

In speaking of the music of nature as he found it in the beautiful Yosemite, and enraptured by the music of the great water falls and the beautiful Merced river, John Muir says:

“Sing on brave Merced, fresh from your snowy fountains: splash and swirl and dance to your fate in the sea, bathing, cheering every living thing along your way.”

And of the Bridal Veil Falls he pictures it as singing in the winds, clad in gauzy, sun-sifted spray, half falling, half floating, it seems infinitely gentle and fine. But the hymn it sings tells of the solemn, fateful power beneath its soft (white veil) clothing.

How the poets love to write of music of nature as it

appeals in the thunder-storm or winds whistling through the forests or the waves of the sea as they dash upon the rocks. Note how Longfellow, in the beginning of the beautiful poem "Evangeline," says:

"Ye who believe in affection that hopes and endures and is
patient,
List to the mournful tradition still sung by the pines of the
forest."

Or as another writer says as he would picture the music of the Happy Isles:

"Oh the mountain music of the mountain isles,
There cool winds are singing
And crystal waters flinging
Their diamond dancing laughter about the Happy Isles."

And another poet entranced by the flow of the "Silver Apron" pictures it as a variety of creeping, murmuring streams:

"That leap madly over precipice, or dash with reckless speed
through rocky chasm.
Singing loudly and merrily."

Then again as:

"Leaping, shouting in wild exultant energy over rough boulder
dam, joyful, beautiful."

Tennyson's "Harold" says:

"Love is come with a smile and a song,
Love will stay for a whole life long."

"Thou art my music; would your wings were mine."

As we look further and consider music in its relation to song, we see some of the poetic expressions as crystallized in vision and then emphasized in music and song.

These poetic visions as they picture the wonderful goodness of the Creator are reinforced by the harmonies of music.

Come, O my soul, in sacred lays,
Attempt thy great Creator's praise,
But O, what tongue can speak his frame,
What mortal verse can reach the theme.

In all our Maker's grand designs,
Omnipotence with wisdom shines.
His works through all this wondrous frame
Declare the glory of his name.

Enthroned amid the radiant spheres,
He glory like a garment wears,
To form a robe of light divine,
Ten thousand suns around him shine.

Raised on devotion's lofty wing,
Do thou, my soul, his glories sing,
And let his praise employ thy tongue,
Till listening worlds shall join thy song.

THOMAS BLACKLOCK.

For the beauty of the earth,
For the beauty of the skies,
For the love which from our birth,
Over and around us lies.

For the beauty of each hour,
Of the day and of the night,
Hill and vale and tree and flower,
Sun and moon and stars of light.

For the joy of ear and eye;
For the heart and mind's delight,
For the mystic harmony,
Linking sense to sound and sight.

For the joy of human love,
Brother, sister, parent, child,

SOME ARTS OF LIFE

Friend on earth and friends above,
For all gentle thoughts and mild.

F. S. PIERPOINT.

Father, how wide thy glory shines,
How high thy wonders rise,
Known through the earth by thousand signs,
By thousands through the skies.

Those mighty orbs proclaim thy power,
Their motions speak thy skill,
And on the wings of every hour,
We read thy patience still.

WATTS.

Thy voice produced the sea and spheres,
Bade the waves roar and planet shine,
But nothing like thyself appears,
Through all these spacious worlds of thine.

Who can behold the blazing light,
Who can approach consuming flame,
None but thy wisdom knows thy might,
None but thy work can speak thy name.

WATTS.

The spacious firmament on high,
With all the blue, ethereal sky,
And spangled heavens, a shining frame,
Their great original proclaim.

The unwearied sun from day to day,
Does his Creator's power display,
And publishes to every land,
The works of an Almighty hand.

Soon as the evening shades prevail,
The moon takes up the wondrous tale,
And nightly to the listening earth
Repeats the story of her birth.

While all the stars around her burn,
And all the planets in their turn

Confirm the tidings as they roll,
And spread the truth from pole to pole.

JOSEPH ADDISON.

Oh, tell of his might,
Oh, sing of his grace,
Whose robe is the light,
Whose canopy space.
Thy mercies how tender
How firm to the end,
Our Maker, Defender,
Redeemer and friend.

Thy bountiful care,
What tongue can recite?
It breathes in the air,
It shines in the light,
It streams from the hills,
It descends to the plain,
And sweetly distills
In the dew and the rain.

ROBERT GRANT.

God moves in a mysterious way,
His wonders to perform;
He plants his footsteps in the sea,
And rides upon the storm.

Deep in unfathomable mines,
Of never failing skill,
He treasures up his bright designs,
And works his sovereign will.

His purposes will ripen fast,
Unfolding every hour,
The bud may have a bitter taste
But sweet will be the flower.

WILLIAM COWPER.

Before the hills in order stood,
Or earth received her frame,

SOME ARTS OF LIFE

From everlasting thou art God,
To endless years the same.

A thousand ages in thy sight,
Are like an evening gone,
Short as the watch that ends the night,
Before the rising sun.

ISAAC WATTS.

Sing to the great Jehovah's praise;
All praise to him belongs;
Who kindly lengthens out our days;
He demands our choicest songs.

His providence has brought us through
Another various year;
We all with vows and anthems new
Before our God appear.

CHARLES WESLEY.

In every condition, in sickness, in health,
In poverty's vale, or abounding in wealth,
At home and abroad, on the land, on the sea,
As thy days may demand, shall thy strength ever be.

When through fiery trials thy pathway shall lie,
The rivers of woes shall not thee overflow;
For I will be with thee thy troubles to bless,
And sanctify to thee thy deepest distress.

E'en down to old age all my people shall prove
My sovereign, eternal, unchangeable love,
And when hoary hairs shall their temples adorn
Like lambs they shall in my bosom be borne.

GEORGE KEITH.

His mountains lift their solemn forms,
To watch in silence o'er our land
The rolling ocean, rocked with storm,
Sleeps in the hollow of his hand.

CALEB T. WINCHESTER.

The heaven of heaven cannot contain
Thy majesty, and in thy train

The archangel veils his face,
Yet curtained tent or temple fair,
If humble, contrite hearts be there,
May be thy resting place.
We sing thy wondrous works and ways,
We sing the glorious displays.

MRS. F. K. STRATTON.

Thy hand has hid within our fields
Treasures of countless worth,
The light, the suns of other years,
Shine from the depths of earth;
The very dust inbreathed by thee,
The clods all cold and dead,
Wake into beauty and to life
To give thy children bread.

Thou who hast sown the sky with stars,
Setting thy thoughts in gold,
Hast crowned our nation's life and ours
With blessing manifold.
Thy mercies have been numberless,
Thy love, thy grace, thy care,
Were wider than our utmost need,
And higher than our prayer.

HENRY BURTON.

Here may we prove the power of prayer,
To strengthen faith and sweeten care,
To teach our faint desires to rise
And bring all heaven before our eyes.

WILLIAM COWPER.

Oh, the lost, the unforgotten,
Though the world be oft forgot,
Oh, the shrouded and the lonely,
In our hearts they perish not.

How such holy memories cluster,
Like the stars when storms are past,
Pointing up to that fair heaven,
We may hope to gain at last.

CHRISTOPHER C. COX.

Come near and bless us when we wake
 Ere through the world our way we take;
 Till in the ocean of thy love
 We lose ourselves in heaven above.

JOHN KEBLE.

So shall it be at last, in that bright morning,
 When the soul waketh, and life's shadows flee;
 O in that hour, fairer than daylight dawning,
 Shall rise the glorious thought—I am with thee.

HARRIET B. STOWE.

TOPICAL SUGGESTIONS:

1. From dawn of history, music and song has furnished much of the pleasures of life.
2. In community life and religious gatherings, as seen in the history of Israel.
3. The nations in their music and song. Grecian mythology, Indian war-dance and chant. Chinese. The French and the Marseillaise, American and Star Spangled Banner.
4. Song, the expression for all occasions.
5. Shakespeare comment on music.
6. Animal life, musical, Longfellow's poetic vision of freedom from care.
7. John Muir and beautiful Yosemite.
8. Songs of many poets in use to-day, Watts, Joseph Addison, Wesley, Cowper, Harriet Beecher Stowe, and others.

XVII

LITERATURE

IN literature the great appeals to men are made through their sense of the goodness of God, justice, mercy and love; and to the altruistic sense of courtesy and kindness. In all ages when men have striven for the higher ideals of life and character the outstanding marks of their writings have embraced these appeals.

The writer of historical facts finds a ready response in reciting the appeals to gratitude, justice and love in fringing out the scenes with these colours in their pictures. You will see this in the expression "et tu, Brute!" in the death of Julius Caesar and in the appeals of Mark Antony in his oration over the body of Caesar, as depicted by Shakespeare.

A special touch of interest is given when a scene pictures magnanimity of spirit in a great man as painted by the historian in describing the "Surrender at Appomattox," where General Grant returns the sword to General Lee. Note how the student grasps the facts of history when a scene is described such as "Socrates drinking the hemlock" or the vanishing race of the American Indians. And how the patriotic flame is revived when the writers picture the scene of Lord Nelson at the naval battle of Trafalgar. Or it may be seen in the description of the martyrdom of Latimer and Ridley with the heroism and tenacious purpose to spread the light. We see it as the appeal reaches the reader of history when he

describes Lincoln witnessing the sale of a little mulatto girl on the auction block in New Orleans: as Lincoln stood there as a young man and looked on he said: "If I ever get a chance to hit that thing I will hit it hard." Such appeals to the sympathies and self-sacrificing spirit of humanity fan the spark into a flame, arouse a passion for service and lead to the higher ideals of life.

In poetry, whether epic, lyric or dramatic, the appeal can be made to the sympathy for the suffering, thoughtful, lovely and chivalrous, relating to both God and man, as the poet Coleridge says in the "Ancient Mariner":

"He prayeth best who loveth best
All things both great and small,
For the dear God who loveth us
He made and loveth all."

In our songs for the uplift of character to stimulate religious, patriotic and domestic fervour, and with music to reinforce the conception, the highest reaches are found in such appeals.

In the Psalms of David the appeals are centered upon the goodness and wisdom of God as in the following lines:

"Oh, that men would praise the Lord for His goodness,
And His wonderful works to the children of men."

In Longfellow's "Evangeline" our sympathies are drawn out to the heroine in her faithful search for Gabriel, her betrothed; and her love, courage and endeavour manifest in the quest for her lover.

In Tennyson's "In Memoriam" our finer feelings are touched when the writer gives vent to his great love and longing as he utters the cry:

"But, oh, for the touch of the vanished hand,
The sound of a voice that is still."

Even in mythological lore, as in Homer's "Iliad," we see the appeal and interest clustering around and enfolding the sentiment of love, affection and patriotism thrown into this wonderful work of poetic art.

In fiction, the novel or almost any class of literature, this principle is outstanding as the most important factor in maintaining the interest. As pictures upon the walls of the home impress and tend to mould the character of the children of the home, so the books of the home reflect their character upon the lives and character of their readers.

We rear monuments to men and revere their memory only as they have served humanity as shown in their lives of sympathy, affection and endurance for some great cause of mankind.

The great in the "Temple of Fame" are known only by these marks of service.

The impelling force behind the activities may be a great passion for a righteous cause which blossoms out in the time of crisis. We see this in the lives of men and women as they come forth in the time of stress and measure up to the noblest requirements of the age. They appear to have been born for such times to meet the crises which absorb their powers and often their lives.

The suggestion of Mordecai to Queen Esther is here apropos, "Who knoweth whether thou art come to the kingdom for such a time as this"—and the response, "And so I will go in unto the king—If I perish, I perish." This self-abnegation will ever mark her as the "Good Queen Esther," and the story will live through the ages for its wonderful pathos and sublimity of passion and purpose.

The stories, sketches and historical facts involving sublime courage, sympathy, endurance and love will ever

appeal to the hearts of men. They are so created that the normal soul responds to the finer feelings of altruism.

If you will study the goodness of God as suggested by the Psalmist, and the goodness of life and character of any good man, you will be drawn to it. You will note this in the simple story of Hawthorne's "Great Stone Face." It follows a natural law of psychology from which you cannot escape.

If you grasp the pathos of those wonderful stanzas: "Break, break, break," you will enter into the longing spirit of the author.

If you will dwell upon the self-sacrificing spirit of the character Sydney Carton in the "Tale of Two Cities," by Dickens, you must be drawn to the wonderful spirit of the man who is willing to lay down his life for his friends.

If you can contemplate the fine spirit depicted in the character of Jean Valjean, in "Les Miserables," by Victor Hugo, and that stormy but sympathetic life, you must be drawn to it.

Or take up the story "Over the Hills from the Poorhouse," by Will Carleton, and see the fine flavour of love and affection shown by the wayward boy and the wonderful response of mother love, then hold in contrast the spirit of the other five members of the "Deacon's Six," you will find that you are drawn to the wayward boy.

If you will study the characters : epiected by Oliver Wendell Holmes in the wonderful word picture "The Boys," and follow the delineation of the characters in the poem, as you follow the description, you will finally fall upon the one outstanding figure of "The Boys." He

points out this boy towards the last, but he is outstanding at the first:

"You hear that boy laughing, you think he's all fun,
But the angels laugh too at the good he has done,
And the children laugh loud as they troop to his call,
And the dear ones that know him laugh loudest of all."

Again when you read that beautiful poem by an unknown writer called "Flying Jim's Last Leap," and note the contrast between the spirit of Aunt Hannah and little Flossie; then the fine sacrificing spirit of Jim when the crisis comes for action. When the fertilizing spirit or pollen of kindness reached the soul of the Tramp and he had become impregnated or born again by the spirit of kindness, and how it makes a hero out of a criminal, you are drawn and touched by the heroic spirit of the man and the gentle kindness of little Flossie.

Here we have a new productive triangle—courtesy, kindness and good-will. Courtesy and kindness beget good-will.

In Shakespeare's "The Winter's Tale" we can see the appeal of the kindly offices of Paulina, the humble but queenly attitude of Perdita, and the self-sacrificing "Queen Hermione" in contrast to the haughty, jealous spirit of Leontes. The contrast of characters, so marked in their attitude to nature's world language—sympathy and love—brings out the wonderful lessons of altruism versus selfishness. This drama alone would mark the author as a man with altruistic vision.

When we take up that wonderful tragedy, "Macbeth," we see how the pangs and burnings of conscience flutter around and dart at the soul of Macbeth as he tries to remove the bloodstains from his hands.

And how the burning words of Portia in the "Mer-

chant of Venice" sink into the soul of the extortioner, Shylock, when he hears the verdict:

"Take thou the pound of flesh;
But in the cutting, if thou dost shed
One drop of Christian blood,
Thy land and goods
Are by the laws of Venice confiscate:
For as thou urgest justice, be assured
Thou shalt have justice more than thou desirest."

Note the wonderful eloquence of Portia as she pleads the cause of Antonio and sets forth the demands of mercy:

"The quality of mercy is not strained,
It droppeth as the gentle rain from heaven,
Upon the place beneath, it is twice blessed,
It blesses him that gives and him that takes.
'Tis mightiest in the mightiest, it becomes
The throned monarch better than his crown,
His scepter shows the force of temporal power,
The attribute to awe and majesty,
Therein doth set the dread and fear of kings;
But mercy is above his sceptered sway,
It is enthroned in the hearts of kings,
It is an attribute of God himself."

In the "Tale of Two Cities," by Dickens, how the heart is drawn out to the character of Sydney Carton when he says:

"I can always work other people's sums, but my own I cannot solve."

Without any adornment the two parables, "The Prodigal Son" and "The Good Samaritan," suggest a beauty of life and character to be emulated by men in all contacts of life.

It was discerned by orators long ago, and is practiced

by many public speakers and writers to-day, that a strong appeal to the sympathies of hearers and readers is found in quotations from books and writings with which there is a mutual familiarity and interest. Also that the mention of places, nationalities, or sympathetic lines of thought of mutual interest tends to increase and stimulate an intensity of emotion in hearers and readers. We note how Lincoln in his great debates with Judge Douglas caught the interest of his hearers when he, Lincoln, would quote in his arguments, "A house divided against itself cannot stand. I believe this government cannot endure permanently half slave and half free." The appeal was founded on a passage and a book with which multitudes were familiar and held in sacred reverence.

And what a sense of distrust comes into the mind when one quotes: "The voice is Jacob's voice, but the hands are the hands of Esau." What a sense of responsibility and care rushes into the conceptions of men when the familiar quotation from Pope's "Essay on Criticism" is quoted: "Fools rush in where angels fear to tread." What a picture of remorse and guilty conscience comes to our vision when one quotes from Poe's "Raven": "Take thy beak from out my heart, take thy form from off my door; Quoth the Raven, 'Nevermore.'"

And further, in consideration of poetic verse, we note that great thoughts and conceptions may be encased within a verse or stanza carrying conviction and suggestions which in prose could not be conveyed without prolixity and a multitude of words.

Various moods and emotions may be suggested by some of the following stanzas, which show also the moulding processes functioning within the minds of men.

These emotions carve out the more perfect and sympathetic character bespeaking higher and better citizenship, which also functions in a higher regard for our Creator and altruistic service for men.

REVERENCE

Last night in beautiful moonlight
 I sat by my window alone,
 And peered with an awful pleasure
 Far into the great unknown.
 And each little constellation,
 With its thousand, thousand skies,
 Seemed bursting in laughter in basking
 Before my wistful eyes.
 Ah, sweet were the visions that thrilled me,
 Each atom seemed laden with joy;
 And loudly I cried in my musings
 With a feeling that knows no alloy.

PHIL HOFFMAN.

THE BARE-FOOT BOY

Blessings on thee, little man,
 Bare-foot boy with cheeks of tan,
 With thy turned-up pantaloons,
 And thy merry whistled tunes,
 With thy red lips redder still,
 Kissed by strawberry on the hill,
 Through thy torn brim's jaunty grace
 From my heart I give thee joy,
 I was once a bare-foot boy.

WHITTIER.

A coat by honest labor torn
 May wrap a heart as fine as steel,
 And so may husks all weather-worn
 A perfect grain of wheat conceal.

WM. SCOTT.

Hath the pearl less whiteness
 Because of its birth?

Hath the violet less brightness
For growing near earth?

MOORE.

ASPIRATION

Build thee more stately mansions, oh, my soul;
As the swift seasons roll,
Leave thy low vaulted past,
Let each new temple, nobler than the last,
Shut thee from heaven, with a dome more vast,
Leaving thine outgrown shell by life's unresting sea.

O. W. HOLMES.

BROTHERHOOD

Better than grandeur, better than gold,
Than houses and lands a thousand fold,
Is a healthy body, a mind at ease,
And simple pleasures that always please,
A heart that can feel for another's woe,
And count all men as brothers
Is better than gold.

(Author unknown.)

PHILANTHROPY

You hear that boy laughing, you think he's all fun,
But the angels laugh too at the good he has done,
And the children laugh loud as they troop to his call,
And the dear ones that know him laugh loudest of all.

Yes, we're boys, always playing with tongue or with pen,
And I sometimes have asked shall we ever be men?
Shall we always be laughing and joyful and gay,
Till the last dear companion drops smiling away?

Then here's to our boys, its gold and its gray;
The stars of its winter and dews of its May,
And when we have done with our life-lasting toys,
Dear Father, take care of thy children, the boys.

O. W. HOLMES.

GRIEF

I sometimes hold it half a sin
 To put in words the grief I feel,
 For words, like nature, half reveal
 And half conceal the soul within.

And the stately ships go on
 To their haven under the hill,
 But O for the touch of a vanished hand,
 And the sound of a voice that is still.

TENNYSON.

PROVIDENCE

I heard the robin singing
 His happy morning song,
 I saw his helpmeet bringing
 Their breakfast to the young;
 And to me came a whisper
 In words, that softly fanned the tree:
 If God for these so careth,
 Will not he care for me?

I saw the roses growing
 In beauty day by day;
 No queen in all her glory
 So lovely in array;
 And on the leaves were written
 Sweet words and trust to me.
 If God so clothed the roses,
 Will he not take care for thee?

VOLUME LIBRARY.

LIFE'S MUSINGS

Only to know that life holds for me
 Some pledge that I have not lived in vain.

MRS. N. W. FOWLER.

The Grace of Heaven behind thee,
 And on every hand enwheels thee round.

SHAKESPEARE.

We live in a world of flowers and trees,
And grass and seas,
And mountains and sunshine.

To listen to stars and birds,
To babes and sages with open heart,
To bear cheerfully, do all bravely,
Await occasion, hurry never.

To be worthy,
And wealthy, not rich—
To study hard,
Think quietly, talk gently,
And frankly,
To seek elegance rather than luxury,
And refinement rather than fashion, this is life.

CHANNING.

The art of being happy is the art of discovering
The depths that lie in the common daily things.

BRIERLY.

Cheerfulness and contentment are great beautifiers,
And are famous preservers of youthful looks.
There is nothing in this world so irresistibly contagious
As laughter and good humor.

DICKENS.

HOPE

I hope to see my Pilot face to face
When I have crossed the bar.

TENNYSON.

And man whose heaven-erected face
The smiles of love adorn
Man's inhumanity to man
Makes countless thousands mourn.

The friend of man, the friend of youth,
The friend of age, the friend of truth,

If there's another world, he lives,
 If there is none he makes the best of this.

To thou who kindly doth provide
 For ev'ry creature's want,
 We bless thee, God of nature wide,
 For all Thy goodness lent.

When nature her great masterpiece designed,
 And framed her best work, the human mind,
 Her eye intent on all the many plans,
 She formed of various parts the various man.
BURNS.

BROTHERHOOD

The light within which glows without
 Is courtesy and kindness;
 It glows and shows, it shows and glows,
 Till brotherhood shall bind us.

INNOCENCE

Two ladies met a boy one day,
 His legs were briar scratched,
 His clothes were blue, but a nut-brown hue
 Marked a place where his pants were patched.

They bubbled with joy at the blue-clad boy,
 With the spot of nut-brown hue;
 "Why didn't you patch with a color to match?"
 They chuckled, "Why not blue?"

"Come, don't be coy, my blue-brown boy,
 Speak out," and they laughed with glee;
 And he blushed rose-red, while he bashfully said,
 "That ain't no patch, that's me."

WALDORF WINDOW.

LIGHT WITHIN SHOULD GLOW

Our lives and lines are miles apart, yet miles of love between;
 And when we leave the folks at home their love should keep us
 clean.

When'er we think of home and friends our hearts are warmed
with cheer ;

Our thoughts go over mem'ry's line back to the place so dear.

So when upon life's journey rough, or on the sea we roam,
And think of all the lovely things, we always think of home.

But while you, in your bosom calm, with life so full, as lovers,
When'er you think of friends and kin, sometime remember others.

Mayhap the man with solemn face and with a load of care,
Use courtesy and kindest grace, good will is needed there.

Perhaps he has a wife at home who needs a doctor's care,
And kiddies two or three or more who need your kindness there.

The "Bare-foot Boy" or girl so fair, who in your path may rove,
In future days and years to come, along your side may move.

A son-in-law or lady fair may at your hearthstone reign,
The smile of kindness shown to them will on your future rain.

It may be in declining years, when lights are burning low,
Or in the solemn hour of death, the smile you sowed will glow.

And whether in the home or school, or in the crowded throng,
Consider how the hearts of men are cheered by smile and song.

You may not in the pulpit stand to preach the doctrine rare,
But in the common walks of life we all your glow may share.

So when we see a fellow-man, in travels far and near,
Consider he's a brother, friend, who needs your smile to cheer.

With courtesy and kindly smiles, in earthen vessels given,
You bring the smiles to all mankind, build bungalows in heaven.

So "Smile awhile, and while you smile, another smiles as well ;
And soon ther're miles and miles of smiles," because you smil'd
so well.

MEMORY

You may break, you may shatter the vase if you will
 But the scent of the roses will hang round it still.

MOORE.

When time, who steals our years away,
 Shall steal our pleasures, too,
 The memory of the past will stay
 And half our joys renew.

MOORE.

PATRIOTISM

Lives there a man with soul so dead
 Who never to himself hath said,
 "This is my own, my native land."
 Whose heart hath ne'er within him burned,
 As home his footsteps he hath turned
 From wanderings on a foreign strand?

If such there be, go mark him well,
 For him no rapturous minstrel swell;
 High though his title, proud his name;
 Boundless his wealth as wish can claim,
 The wretch, centered all in self;
 Despite his boundless power and pelf,
 Shall return to earth from whence he came
 Unwept, unhonored and unsung.

WILLIAM SCOTT.

INGRATITUDE

Freeze, freeze, thou bitter sky,
 Thy bite is not so high
 As friend remembered not;
 Though thou the waters warp
 Thy teeth are not so sharp
 As benefits forgot.

SHAKESPEARE.

LONGING

Of all the myriad moods and mind
 That through the soul come thronging,

What one was e'er so dear, so kind,
 So beautiful as longing.
 The thing we long for that we are
 For one transcendent moment.

JAMES RUSSELL LOWELL.

REFLECTION

"When upon life's billows
 You are tempest tossed;
 When you are discouraged,
 Thinking all is lost,
 Count your many blessings;
 Name them one by one;
 And it will surprise you
 What the Lord has done."

J. OATMAN, JR.

* * * *

"And honor the man who is willing to sink
 Half his present repute for the freedom to think."

MEREDITH.

* * * *

MOONLIGHT MUSINGS

"I love to sit on a clear, calm night,
 When the moon is hid and the stars are bright,
 And ponder the depth and power of love,
 That prompted the God of nature above,
 To fashion the world by his wondrous might
 And give it such gleams of peace and light."

B. S. SMISER.

* * * *

"Might, most scored of the souvenirs of life."

* * * *

"To realize one's dreams there must be an election from heaven,
 We are the candidates, unknown to ourselves,
 The angels vote."

VICTOR HUGO.

"THE BOYS"

Has any old fellow got mixed with the boys?
 If there has, take him out without making a noise.

Hang the almanac's cheat and the catalogue's spite,
Old time is a liar, we are twenty to-night.

We're twenty, we're twenty, who says we are more?
He's tipsy young jack-a-napes, show him the door.
Gray temples at twenty? Yes, white, if you please,
Where the snowflakes fall thickest there nothing can freeze.

Was it snowing I spoke of? Excuse the mistake;
Look close, you will see not a sign of a flake.
We want some new garlands for those we have shed,
And these are white roses instead of the red.

We've a trick, we young fellows, you may have been told,
Of speaking in public as if we were old.
That boy we call Doctor, and this we call Judge,
It's a neat little fiction—of course it's all fudge.

That fellow's the Speaker, the one on the right,
Mr. Mayor, my young one, how are you to-night?
There's our Member of Congress, we say when we chaff,
And there's the Reverend, what's his name, don't make me laugh.

That boy with the grave, mathematical look,
Made believe he'd written a wonderful book,
And the Royal Society thought it was true,
And they took him right in, a good joke it was, too.

That boy, we pretend, with the three-decker brain,
Could harness a team with a logical chain,
When he spoke for our manhood, in syllabled fire,
We called him the Justice, but now he's the Squire.

There's a nice youngster, of excellent pith,
Fate tried to conceal him by calling him Smith,
But he shouted a song for the brave and the free.
Just read on his medal: "My Country, of Thee."

Do you hear that boy laughing? You think he's all fun,
But the angels laugh, too, at the good he has done.

And the children laugh loud as they troop to his call,
And the dear ones that know him laugh loudest of all.

Yes, we're boys, always playing with tongue or with pen,
And I sometimes have asked, Shall we ever be men?
Shall we always be laughing and joyful and gay,
Till the last dear companion drops smiling away?

Then here's to "Our Boys," its gold and its gray,
The stars of its winters and the dews of its May,
And when we have done with our life-lasting toys,
Dear Father, take care of thy children, "The Boys."

OLIVER WENDELL HOLMES.

TOPICAL SUGGESTIONS:

1. The great appeals of literature—love, mercy, justice and altruistic service.
2. Outstanding incidents—Grant, Lee, Abraham Lincoln, Lord Nelson.
3. Coleridge, Tennyson, David, Homer's Iliad.
4. The pictures of the home. Temple of fame. Queen Esther, Jean Valjean in *Les Misérables*, Shakespeare's *Winter Tales*, *Merchant of Venice*.
5. Poems—Hoffman, Scott, Moore, Whittier, Holmes, Tennyson.
6. Dickens, Burns, Meredith, James Russell Lowell.
7. "Over the Hills from the Poor-house." Will Carleton.
8. "Moon-Light Musings," by B. S. Smiser; "The Boys," by Oliver W. Holmes.

XVIII

COLOUR, NATURE'S ART

UNDER individuality and form, we have seen how nature, the handmaid of our Great Creator, has wrought out as with a sculptor's chisel the various forms of life and has performed the functions of the Supreme Sculptor. And as the Supreme Architect has laid the foundations of the mountains, hills and valleys with their outstanding grandeur, with all their appeals of utility and pleasure, so we may now consider and muse upon His wonderful creative genius in the field of colour.

In considering the goodness of God we must see how colour contributes to the welfare of mankind. We may call it Nature's Art.

As the notes of music are to the ear, with the range of seven keys or notes within the octave called the scale, so the colours of the spectrum ranging from the red through the spectral series: red, orange, yellow, green, blue, indigo and violet, may be to the eye as the impressions are received. And, as there are many variations of tone and pitch in music, so in colour there may be many corresponding shades and variations within the spectral zone.

Colour appears to be one of the great gifts of God contributing to man's welfare. It may be considered from the point of felicity or joys, also from the standpoint of utility or usefulness, and a combination of these two view-points.

The beautiful flower, as it may grow in the field or garden which appeals to the eye and calls forth many expressions of delight, may also be useful in the propagation of the species. As we consider colour from the standpoint of utility we find it filling a large place. One may conceive that colour, with its appeal to the eye, in early times might have drawn man to the blossoms of the fruit trees for the purpose of noting the fruit and arousing his curiosity in watching its development. The blossom fades but the fruit continues to grow with practically the same colour as the leaves until the time of harvest is near. Then the fruit puts on another colour which again attracts man to the tree. Lo, and behold! the fruit has matured, it is mellow and with sweet odour, together with appetizing flavour, so he regards it as good for food. After seeing that it is good for food, he begins to cultivate the tree. The blossom has also an attraction for the bee and insects which carry the pollen for fertilization.

All nature appears to be provided with colour to suit the vision of mankind. The green grass and verdure of the forest are the soft shades most suitable to the more constant vision and exposure of the eye, as also the blues of ocean, sky, and many shades in all nature. They are restful and non-exciting in their reflections of light. When nature wishes to warn of danger in the common experiences of life the flash of lightning or bright lights of fire running through the spectral colours, red, orange or yellow, are called into play, and from these colours we note the dangers of fire and electrical disturbances.

There is also a function of colour in the scheme of natural selection in the propagation of animal life as well as in vegetable life. The bright colours arouse the more vivacious emotions of the opposite sex. Chanticleer,

with his flaming comb, attracts and excites the subdued and demure hen. The turkey gobbler with his exuberance of red likewise has the same appeal.

In vegetation colour plays a very important part in propagation. The bee is attracted to the beautiful blossom and sips the honey, carries the pollen away. The next blossom is fertilized by the pollen thus carried. In this way nature provides for fertilization through the beautiful flower as the insects, drawn by colour and odour, carry the pollen to blossoms remote. Other insects, birds and animals are influenced by colour or odour, and in this way fertilize vegetation. The Smyrna fig is propagated by the insect life known as the *Blastophaga*. It is first attracted to the blossom of the Capri or wild fig of Arabia, then carries the juices or pollen to the Smyrna, commonly called in California the *Calismyrna* fig. The blossom, in the case of the fig, lies within the fig, but accessible to the insect.

Not only in the botanical and agricultural world does colour fill a very useful place in contributing to the welfare of man, but in the picturesque scenery of landscape, in the charm of the mountain fastnesses, amid the colouring of tree, vine or forest leaves, as they change their shades and don the dress of autumnal hues, as if in preparation for the coming adieu to the friends of mountain kin.

Again in the green verdure of the meadow with the lowing herd, striped with nature's coat of many colours, and amid the fleecy flock with rich white coat with warmth destined to clothe the nations for winter's blast. It may be as we watch the birds of bright plumage or darker hues which assimilate from nature's bountiful supply, all colours of the rainbow in preparation for adornment of milady or for man's charm and wonder.

The coloured rocks may mark the wealth in gold or silver ore, or it may be in the black strata of coal, the white sand of ocean beach, or among the many shades of rock and shale as our eyes feast upon the painted forest of Arizona, or the shales of Yellowstone mingled with the phantom-like arms of the great geysers. It may be the beauty of the clouds when the morning sun or evening glow changes the mist and cloud to rainbow beauty. Or it may be the running stream prancing and leaping over rock with splashing spray, now a rainbow effect as seen under the Vernal, or Bridal Veil Falls, of Yosemite, then the white, rolling mist as it settles down to the dark hues of the common stream.

It may be among the beautiful animals of God's creation in the stripes of tiger or zebra, the leopard spots, the brownish coat of the lion or darker and sombre hue of the elephant.

Again it may be among the domestic animals with colours mingled in dainty stripes or solid coat as we note the Holstein or Jersey, or the horse (man's load lifter), whose colours range from pure white and stripes to the jet black with raven mane.

In the dress of all nations colour plays a large part in life's chapter. In army and navy regalia and uniform colour schemes, wrought out in many designs, mark grades, rank, power and authority; or it may be in the rank and file of the common soldier, the shoulder markings, the chevron stripes, and lines upon the wristbands, all speak of authority and service. The insignia of military or navy uniform marked by colour or colour dress may speak of the department and the branch of the department.

The flags of various nations, with their colours, stripings and designs, shades and hues, are an interesting

study, depicting the psychology, sentiment, form of government, and even the type of civilization.

By colour and form, the American flag with its broad field of blue with the setting of bright stars, signifying the many states, yet the one nation, the streaming colours of white and red speak of purity and love, and the whole typifying the highest spirit of brotherhood and goodwill. Colour marks here the nobility of sentiment and higher ideals of the Republic. Again the Union Jack or British national emblem, with its colours and cross striping with the many and varying designs, speak of the British character and the many peoples embraced within her dominion. So on through the world the flag stands as an exponent of the character and purpose of the peoples over which it flies. On the field of battle the flag with its streaming colours has a psychological effect upon the soldier and sailor, renewing courage as it floats in mid-air, or carried forward, leading the charge or holding ground. Or it may be seen to fall amid the rush and charge of battalions, thus speaking of imminent danger and threatened defeat, causing either renewed energy in battle or a depression of spirit.

The waving of the battle flag has saved many an army when defeat was threatening and courage failing. The flag is also used as an insignia or symbol in directing military and naval operations, the colours marking command and movement.

The singing of the "Star-Spangled Banner," with its lofty sentiment of courage and loyalty symbolizing sacrifice and endurance, or waving it aloft amid the dangers of battle, will renew the spirits of men and snatch victory out of threatening defeat. The waving of the flag may be pictured as stimulating courage, endurance and service.

Colour is the basis or key of signaling in railroad traffic, warning or advising by means of various coloured lights, both by night and by day. Likewise ocean steamers and light-house warnings, the street traffic and car signals are given by colours flashed or plainly seen.

The merchants with stores, along business lines of commercial life, use the bright and coloured lights in promoting trade as they advertise their wares.

Colour fills a very large place in many other lines of advertising. It functions in society among the more discriminating who plan and seek for harmonies in colour scheme and dress with a view to matching complexion with colours apropos. Women especially have become very skilled in arranging dress, material and colour in a manner pleasing to the eye. To-day ladies are keen in their observance of dress, and any violation of colour scheme by inappropriate matching of colours to suit form and figure, may be subject to remark and even criticism in some circles. This keenness of perception and harmonious planning has been very educational in a way, so that this sense being highly developed, has quickened many other traits of character, leading to sanitation, hygiene, and a keener observance of the beautiful, the true and the good.

Among milliners and those educated in the arts of dress a violation of colour scheme and harmonious adornment meets with a frown which may be parried only by acceptance of their judgment.

Colour is well associated with the harmonies of nature, and moves along with the education and refinements of society. When man awakes to the real beauties of nature, the harmonies of the heavens, the colourings of clouds, the charm of life in pigments, he comes close to the call of the Psalmist as he exclaims: "When I consider thy

heavens the work of thy fingers, the moon and the stars which thou hast ordained, what is man that thou art mindful of him," etc.

The Michael Angelos, Rembrandts, and all the great artists of history are admired for their vision and skill in placing on the canvas in face, form and landscape the expressions depicting nature in colours, and as we often say, "true to nature."

The language of colours spoken by flowers and dress has become so prevalent that the expression is common: "Say it with flowers." The violet speaks of thoughts, the rose of affection, and carnation of character. The darker, somber hues of dress may speak of the departed under certain conditions, and a dress of bright, flashing colours at some services may be considered offensive if not almost sacrilegious.

Colour and colour schemes have become so woven into the fiber of our character that they are recognized as having an exhilarating or depressing effect upon our disposition. Men and women are careful of the adornments of homes and rooms. The sitting room and library may require very different colour finishings; the kitchen still another, and the bedroom another to harmonize with furniture and moods to match.

The bright and coloured lights of the city attract youth with alluring appeal. So in all gatherings where appeal to youth is made the brighter lights are apropos. The varying and shorter wave motions marked by length and rapidity, producing colour as they move more rapidly from red to the ultra violet, have been instrumental in discoveries, helpful to surgery and dentistry, as they have been able to penetrate and photograph the interior of the human body by Roentgen rays.

A noted scientist, in his treatment of animal life in

Bionomics, says that the inherent power of some animals to change their colour to conform to their environment serves as a protection from their enemies in seasons of greater danger. The rabbits and animals of the polar regions change their colour to suit the season and environment. The female of nearly all animal life, exposed to dangers from which she cannot easily escape, has donned the colours of feather or skin less attractive than the male, and approaching the shades of the general environment in order that she may escape notice, and not be subject to disturbance during the hatching season, and as a protection from other animals. This is especially noted in the protective camouflage of insect life.

This faculty of "protective resemblance" in animal life to change colour to conform to their environment not only enables them to escape other animals, but to draw within striking distance of their prey. They may change not only colour but form to blend with the surroundings. Among the insects with this faculty are the span-worm, the walking-stick, the praying-mantis, the ivy caterpillar, desert lizard and walking-leaf. The last named is a native of India and it is said that they sometimes deceive the natives, who may take them for transformed leaves.

This faculty of camouflage is possessed by sea life and many reptiles, birds and mammals.

Referring again to the artists:—to-day two Rembrandts sell for \$750,000; the most noted picture in the Temple of Diana, Apelles' famous picture of Alexander the Great, is valued at \$200,000. These are suggested to show how men have prized the paintings of great artists and the value placed upon colour.

So in all these matters relating to colour we can see

the wise provision made for man through the laws of colour.

An unknown poet has said:

“There is not a tint that paints the rose
Or decks the lily white,
Or makes the humblest flower that grows
But God has placed it there.

There's not of grass a single blade
Or leaf of lowliest mien,
Where heavenly skill is not displayed
And heavenly goodness seen.

TOPICAL SUGGESTIONS:

1. As music is to the ear, so color is to the eye. The seven notes within the octave, and the seven basic colors.
 2. Color is an important factor in fertilization and development of fruits and flowers.
 3. Colors suitable to man's eye and vision. It plays a part in warnings of danger, in propagation and attraction.
 4. Colors in geological formations; animal and vegetable life.
 5. The flags of various nations, and what they stand for. National sentiment and inspiration to valour and loyalty.
 6. Colors in dress and harmonious adornment speak of taste and care. The studies of harmonies of color is educational.
 7. The language of flowers and colors. Michael Angelo and Rembrandt. Colors on canvas and nature in colors.
 8. Animal life uses colors for protection, deception and attraction. Protective resemblance common among animals and insects. Values placed on paintings. Poetic expression on color.
- References—Thomson, Outline of Science, page 144.

PART V
The General Purpose of Life

XIX

PURPOSE OF SUFFERING

THE question of suffering and its benign purpose may well come under this caption, showing the goodness of God in His relations, adaptations and purpose.

Many will ask, How is the goodness of God shown in the sufferings of mankind? Can God be just and good in allowing man to suffer under the pressure of these relationships?

It is said that when God had created man He pronounced him, with all creation, "very good." To keep man good, as proclaimed, a warning voice was given, suggesting a penalty for violation of law. Self-indulgence, flouting the command, met the penalty inexorable in the first violation as it relates to God.

As in the case of Cain, jealousy or envy marked the violation as related to others.

In whatever way we may consider the first violation of law, as in the case of Adam, or as related to other men or neighbours, as in the case of Cain, we note that self-indulgence in the former case caused the break. In the case of Cain the violation was against his brother, which, likewise, led to estrangement and penalty.

And down through the ages these two phases of violation of law—violation directed against God (in contradiction of the law, "Thou shalt love the Lord thy God,") and violation against man ("Thou shalt love thy neighbour," etc.) have been the great outstanding features of

all law violation. The same laws remain inexorable to-day. "In the day that thou eatest thereof" (violate my law thou shalt surely pay the penalty), suffering must follow. The law must stand and suffering is marked not necessarily as punishment for violation, but as a disciplinary provision to guard against repetition. All good law requires a sufficient penalty. The excuse that it will not be as severe as decreed is conceived in childishness and is the common plea of law violators. As the Psalmist says: "The brutish man knoweth not, neither doth a fool understand this."

"God is not mocked, whatsoever a man soweth that shall he also reap."

From the earliest times this law of sequence, cause and effect in life has been recognized. It has become axiomatic: Like will produce like. The warnings are held out as a red flag at a railroad crossing, crying "stop." But, again, as the Psalmist says: "Fools, because of their folly, perish." They heed not, neither do they understand.

As our Creator made provision called penalties for violations of law, we must consider them as good.

The writer, in conversation with a wise university doctor, on a railroad train, suggested the permanency and stability of law as being good. The wise doctor remarked: "If it were not for this law the railroad would be clogged with the killed and injured so that the train could not pass." So, without suffering, man would perish; and it might be said that the law of suffering is the one great law which saves the human race. It may not kill but only injure as a reminder. Without suffering the race would not put violation of law behind and make progress towards the goal of righteousness. The Biblical writer says: "I reckon that the suffering of

this present time is not worthy to be compared to the weight of glory that shall be revealed in us." It is an economic factor to preserve the race. Suffering was then introduced to save the race from obliteration; were it not for the suffering and penalty, all men, women and children would become careless and cease to make progress towards better conditions of life, in sanitation, in treatment of one's neighbour, laws of health, care of the child's life and other conditions which minister to man's happiness.

Suffering is as discipline and a schoolmaster to remind us, bringing us into line of duty and to perform our obligations, also to require us to avoid those conditions of life which would pull us down, mutilate our lives and eventually destroy them.

If we put our hands upon a red-hot stove it would burn to a crisp if the nerves would not warn the king in the palace of the danger by suffering.

As the suffering of the physical body reflects the warning of the nervous system that the parts affected need attention, as shown by the chapter on "The Palace We Live In," so mental suffering, as differentiated from the physical, may be caused by the reflection of the censors of the mind which function to warn of dangers and abnormal conditions in the relations of the physical body to other physical bodies which might hurt or threaten injury. Or it may come from a sense of abnormal relations in the social, educational, industrial or political life, which may reflect such unusual relations causing mental suffering. Unless there were mental sufferings from these abnormal conditions, the King in the Palace would not be advised to remove such conditions and replace them with happier relations, bringing back the normal mood.

But, as man may flout and ignore the warnings of the physical censors, the nerves of the body which report dangers to the King in the Palace, so the warnings of the mental censors or nerves of perception may be ignored until the penalty of suffering, caused by abnormal conditions, may be visited upon the individual. The neglect or procrastination in action may lead to the extreme penalty.

The wise man will sense and heed the warnings of life whether in the physical realm or mental horizon, and move to rectify all abnormal conditions whether in body, mind or spirit.

Many such unusual or abnormal conditions may arise as purely affecting only the physical or mental life of the individual, or these conditions may be associated with conscience, the great spiritual censor. This censor rises above, but associates with all other censors of the life. It peers into all relations of life, accusing or excusing, according as the various relations may be just or unjust, pure or impure, warning of the dangers of self-indulgence, infringing upon the rights of others and violations of the laws of God and humanity. This censor, conscience, may be trained and enlightened as the nerves of the body and mental perception, in all its activities, weighing, adjusting, balancing until the whole man is moved with a keen sense of God and recognition of courtesy, kindness and good-will.

"'Tis held that sorrow makes us wise
Whatever wisdom sleeps within."

TENNYSON.

Having observed that suffering is designed to preserve the race and contribute to the welfare of mankind,

we would naturally look for the sequence of suffering in its relation to man.

Death appears to be the great clearing-house, so to speak, or the great reservoir to receive the aches, pains and sufferings with the decay of old age, and the torn body even by the accidental violation of the inexorable law.

Why should man die or pass beyond the vale of sense?

The Great Teacher would liken it to the harvest when the wheat may be separated from the tares. As the rain falls upon the just and unjust alike, so death comes to all. As suffering is seen to preserve the race, so death, in conformity to the same law or principle, follows automatically as the ultimate relief from suffering. It is the end of suffering and may be considered in this light.

The maimed body, the distorted mind, the worn-out physical machine, so to speak, all remind us that the end must come to all imperfections. As the law of decay is inexorable, so the law of suffering and death must of necessity be inexorable.

Man is born to die. Whether he reaches the age of three score and ten or even four score, the Biblical writer reminds us that there is still strength, labour and sorrow.

As we read the lives of men and note the thanatopsis of mankind, we see that few men are self-supporting and of sufficient strength to enjoy life beyond four score years. Man at this age does not consider it a boon to live, but rather a joy to pass. The great question is not why men pass in old age or why man passes under suffering, but why childhood, youth and middle life should be subject to this inexorable law; or why the innocent should suffer for the guilty.

Death may be considered the extreme penalty, but not

necessarily a punishment, for violated law, either by the person himself or another. However, the penalty is suffering and ultimately death. Ignorance, and underestimating conditions may thereby violate law, as the prophet says: "Because of ignorance my people perish."

Ignorance would say, "We shall not surely die;" prudence and righteous judgment would say, "Observe the law and live."

Many men worn with physical pain and suffering would welcome a surcease from such life; and a man with distorted mind or vision may so imperil the lives of others that it would be better for all that he pass.

We place men in the penitentiary or other prisons, dead to mankind, as it were, for violation of law, why then may we not consider it a just and providential kindness for man to pass away?

The body and mind will ultimately reach the point of decay and warped vision so that all men would say it is better to pass. Even the most righteous person, when in his full vigour of youth, may become, through suffering and old age, a person to be feared and to be placed under guard.

The seed of the future happiness of the race is wrapped up in death. The only way in which we can reconcile the passing of youth, walking in his integrity and in the path of righteousness, is in considering him as a part of the whole. A part of the body may suffer and be destroyed in order that the rest of the body may be preserved. Ignorance, youth, innocence and guilt, all fall under this law of sacrifice, "A part for sake of the whole."

So the human family may be considered as one body under the inexorable law of suffering and death, which functions to preserve the whole race. These immutable

laws apply as the rain and weather, they fall upon the just and unjust alike. Ignorance is no excuse; whether young or old, innocent or guilty, the law would operate upon all alike.

It is evident that the innocent must suffer, also the mother for the child and even the innocent for the guilty. But the final judgment is with the Giver of Every Good and Perfect Gift.

The grain of corn falls into the ground and does not bring forth or produce except it die. The grass grows and the fruits ripen and are assimilated, thus destroying identity and life, so to speak, that they may produce a larger and different body for the higher creation.

The spider may feast upon the fly, and the wasp likewise upon the spider for the same cause. Or the larger fish may live upon the smaller fish, and it likewise upon the minnow, thus producing and reproducing from the lower to the higher creations until man is reached, who feeds upon the vegetable, fish and cattle.

Were it not that man passes away as provided under these laws, man would be kept so busy providing for the old and decrepid that the children of the youth could not be provided for or receive nourishment. In fact, the whole would become unbearable, and mankind would be destroyed by conservatism. We need the new life and the progressive spirit of youth which would be checked were men allowed to cumber the earth in old age.

It is good, therefore, that the laws of suffering and death are inexorable; that the new life-giving stream may abound and then, having run its course, to likewise pass away.

“Without the shedding of blood (as suffering and

death) there is no remission," or putting behind the evils and imperfections of life.

It requires the young life to properly sense and vision the needs of life as man progresses towards the higher ideals.

It would appear therefore that suffering and death may be considered as necessary and economic expedients for the preservation and development of mankind, also as benign factors in working out the *summum bonum* for the race.

But as the great apostle might say: "Yet I show unto you a more excellent way," as these reflect their purpose in the final destiny of man in the purpose of life.

What a fine tribute to life and its issues were voiced in the memorable words of Mrs. Harding, spoken in the following beautiful lines:

"Let me see his face.
He was magnificent in life;
He is still more wonderful in death."

(Spoken at the closing of the casket of the President at the Palace Hotel, San Francisco.)

THANATOPSIS (excerpt)

To him who in the love of nature holds
Communion with her visible forms, she speaks
A various language; for his gayer hours
She has a voice of gladness and a smile
And eloquence of beauty, and she glides
Into his darker musings, with a mild
And healing sympathy, ere he is aware.

So live that when thy summons come to join
The innumerable caravan, which moves
To that mysterious realm, where each shall take
His chamber in the silent halls of death,

Thou go not, like the quarry-slave at night
Scourged to his dungeon, but, sustained and soothed
By an unfaltering trust, approach thy grave
Like one who wraps the drapery of his couch
About him, and lies down to pleasant dreams.

WILLIAM CULLEN BRYANT.

TOPICAL SUGGESTIONS:

1. Can our great Creator be just and good in allowing man to suffer? Why suffering and for what end?
2. Suffering not necessarily punishment, for the sake of punishment, but a penalty as warning to avoid greater suffering.
3. Suffering necessary as an economic factor to preserve the race. It is a warning of the sentinels of the nervous system to the individual of abnormal relations and conditions. Wise men sense the warning.
4. Suffering of mind as well as physical body brings us to sense dangerous conditions of life.
5. Death the great reservoir or clearing house for aches, pains and suffering body, and a benign purpose in the mind of our great Creator.
6. The seed of the future happiness of the race is wrapped up in death.
7. Were it not that man passes away the children of the youth would suffer and lack proper care and life would become unbearable.
8. Youth required to sense and vision the needs of life as man progresses. Excerpt from "Thanatopsis," by Bryant.

XX

PURPOSE OF LIFE

HAVING considered Providence in the Affairs of Man, we shall take up for study the great purpose of life as manifest or indicated in creation.

Why the creation? What is the underlying purpose?

As in the seed germ we can see the great possibilities of a tree with wide spreading branches, with fruits abounding not only for reproduction but for food supply for mankind, so in the creation of the world in our finite conception we may see the great possibilities of life in its harmonious workings.

Pre-supposing a benign purpose in the creative genius of God in all creation, we find ourselves seeking this purpose as inherent in all things. "All things work together for good to all who love God, to all who respond according to His purpose." Harmony must be the keynote then of all creation if men are to work in accord with the purposes of the Creator; not necessarily on the plans of individuality as separate from the whole, but as the part in conjunction with the whole, to work out the highest good for humanity.

As in the chapters on suffering and death we showed how these work in conjunction with life's purpose for good, considering humanity as a whole, so now we must try to seek the benign purpose as it operates in the individual life and as related to other individuals.

Without individuality we can only conceive a vast void without form. As one writer has said: "It is better to have loved and lost than never to have loved at all." So we must consider that it were better for

man to have been born with all possibilities of love and affection with the characteristics which go to make up individuality than to have never been born at all.

In the great scheme of life, as it works out and weaves into the fabric of character the thread of thought and action, producing the finished garment for approval or rejection, we stop and ask: "Why this great fact involving mankind at last to be summoned to judgment and final placement? The Sphinx, with its ear open and listening for the answer to the question of the ages, asks Why?

Is it for the man's individual good or only for the good of humanity? Again, is it for the good of part of mankind, involving the good of all at the expense of individuality? The answer must be certainly for the good of all which involves the possibility of good for each individual, which possibility for good involves a chance to be counted among the approved of mankind, approved on the ground of character involving the will of the individual. Does he wish or aspire to the highest good in co-operation with the Creator?

Reason would suggest that the *summum bonum* can only be thought or worked out in co-operation with the plans of the Creator, also that man as a free moral agent must come into this harmonious relation if the highest good is to be consummated, the highest good for the individual, and the whole of humanity.

In the fabric of life there is evidently a thread outstanding which connects with and is woven into every other thread. It stands out in the garment as in red letters, and spells Responsibility, a long word, but enveloping a most tremendous meaning for mankind.

In family relation the parent is responsible for the child as long as the child obeys, and the parent is re-

quired by all reason to work out for the child the highest good. But if the child will not respond or co-operate with the parent, it is impossible for the parent to work out for the child the highest good; so we may consider our relation to our Creator. If we obey and respond and co-operate with Him in His evident purpose, He necessarily is required and under obligation to work out for us the highest good. If we do not obey, it is impossible for Him to work out for us our highest good. Mutual responsibility stands.

As suggested before, the innocent often suffer for the guilty, the just for the unjust, the mother for the child, and a part of society for the whole: all for the good of the whole. So some compensation for the individual must claim our consideration.

To reconcile conditions as we find them we must presuppose a continuance of life beyond the earthly existence. The great apostle remarks that "I reckon that the sufferings of this present time are not worthy to be compared with the glory which shall be revealed to us-ward." May we not here conclude that man is in a dual state of existence at the present time—a caterpillar state, so to speak, a spiritual body within the fleshly body—the former to continue to meet the conditions suggested by the great apostle after release from the mortal body. If we can thus realize life, the Beatitudes of the Great Teacher are apropos:

"Blessed are the poor in spirit for theirs is the Kingdom of Heaven." (Be you ever so lean in spirit in this life eternal riches are yours.)

"Blessed are they that mourn for they shall be comforted."

"Blessed are they that have been persecuted for righteousness sake for theirs is the Kingdom of Heaven."

"Blessed are ye when men shall reproach you and persecute you and say all manner of evil against you falsely for my sake—rejoice and be exceeding glad for great is your reward in heaven."

The great apostle again suggests that if there is no resurrection, "then is our preaching vain and our faith also vain? If the dead are not raised at all why do we also stand in jeopardy every hour?"

But, as before, within this dual life there is wrapped up the promise of a full and complete consummation in the highest good, which can only come to those who respond according to the purposes of the Creator. As reason would suggest: "He that willeth," "responds to do His will," shall know whether these things are possible and can become a reality.

But how reach this life condition providing for the *summum bonum*? The writer's answer would be in the formula of the Great Teacher: "That they may know thee" (the goodness of God and loving-kindness in altruistic service).

This is the highest purpose and end of life that we may come into a sympathetic relationship to our Creator so that we may know His character and the evident spirit of the Great Teacher as He went about doing good (loving-kindness and altruistic service). This means good-will among men and sympathetic relationship to the Creator of us all.

Underlying the whole scheme of creation and civilizing processes of man, the prime purpose appears to be to bring man into a sympathetic relation to the Creator in character and into good fellowship with one another. With this purpose very evident, the teachings of the Great Teacher are apropos, as He would impress the race with the spirit of loving-kindness. In one place

He says: "Where two or three are met together there am I (loving-kindness) in the midst." In the marketplace, in the mines and factory, in the counting-house and schools, in politics and religious congregations where the spirit of courtesy and good-will is manifest there the dove of peace rests. The kind courtesies of life as they are exchanged in greetings, the giving a cup of cold water, the ministration to the sick and sympathetic touch, all manifestations of the higher aspiration, give promise of a character prepared for the consummation in the life eternal.

As the blossom of the fruit tree in its beauty and attractiveness is to the fruit, so is this life to the character to be evolved. The blossom is only the evidence and has possibilities of the fruit, and not the fruit itself. If we care for the deeper life of the pistle the fruit evolves most naturally, so man if he responds to the larger purposes of life and cultivates a sympathetic knowledge of God and moves with altruistic purpose, manifesting the spirit of loving-kindness, he evolves the *summum bonum* or highest good for the individual and humanity.

SOME TIME AT EVE

Some time at eve, when the tide is low,
 I shall slip my anchor and sail away;
 With no response to the friendly hail,
 Of kindred craft in the busy bay.
 In the silent hush of the twilight gale,
 When the night stoops down to embrace the day,
 And the voice-call in the waters flow—
 Some time at eve when the tide is low,
 I shall slip my moorings and sail away.

Through the purpling shadows that darkly trail
 O'er the ebbing tide of the unknown sea:
 I shall fare me away with a dip of sail,
 And a ripple of water to tell the tale

Of a lonely voyager, sailing away;
 To the mystic Isles where at anchor lay
 The crafts of those who have sailed before,
 O'er the unknown Sea to the unknown Shore.

A few who have watched me sail away,
 Will miss my craft from the busy bay.
 Some friendly barks that were anchored near,
 Some loving souls that my heart held dear;
 In silent sorrow will drop a tear,
 But I shall have peacefully furled my sail
 In moorings sheltered from storm and gale,
 And greeted the friends who have sailed before,
 O'er the unknown Sea to the unknown Shore.

HARDY.

The poet Longfellow aptly writes:

"Life is real, life is earnest,
 And the grave is not its goal,
 Dust thou art, to dust returneth
 Was not spoken of the soul."

TOPICAL SUGGESTIONS:

1. Why the creation and what is the underlying purpose? We presuppose a benign purpose from observation. Harmony and development the key-notes.

2. The great scheme of life as it works into the development of character with possibilities of greater good for the individual and humanity.

3. The highest order can only be attained by obedience to law, as illustrated in the family relations. Child and parent.

4. To reconcile relations here we must presuppose a future existence.

5. The highest conception of life to bring man into harmonious relations with his Creator.

6. The highest functions of life is to develop a sympathetic relation to one's fellow in altruistic service.

7. Character evolves as the fruit from the seed, the blossom corresponds to life's activities the evidence of life within the seed.

8. Stanza from Longfellow.

XXI

LIFE AND LIGHT

THIS gift of God to man and marking the crowning of His creation, may be considered the greatest contribution to mankind showing the goodness of God.

Some man will say that life to some is a burden, to others a questionable reality. But to most of mankind it is a gift to be valued and prized above all others.

Under other chapters we have shown how death and suffering were manifestations of the goodness of God, so we may reasonably show how life in its many phases may be considered good.

When we enter upon the discussion of this question we must assume the normal, physical, mental and spiritual life of man as observed by our experiences and observations in life. The Great Teacher said "all things work together for good," and when God created man He pronounced His creation "very good." Life, suffering, death, with their unending influences upon the other creations and relations, may mark a point in creation called Good.

We may speak of life and consider it in its relations to other creations, its adaptations to the world activities, and its functions in the great scheme of God's creation. The normal life may be that of man bound up within the three score years and ten, including the physical, mental and spiritual activities attending such life. When we consider what the universe would be without man to

appreciate it, to co-operate with the great forces moving within and about this creation and to function in a manner to work out the great purpose of the Creator, we would say with the Biblical writer: "Without form and void;" nothing to be seen, handled or known, simply "void." Can you grasp the meaning of this word?

But the giver of every good and perfect gift places life above all other phases of existence, and pronounces the penalty of violation of law directly against it. In the day thou eatest thereof (violate my law) thou shalt surely forfeit this gift, life, with all its possibilities.

Death begins in suffering which is the first noticeable penalty of violated law, and continues through the physical life. The possibilities of life, as differentiated from actual physical life, constitute or comprise the full development of mental and spiritual life which would naturally grow out of obedience and faithful observance of law.

Although we may suffer in the physical body, yet the great possibilities of life in mental and spiritual values are vouchsafed to all who will co-operate in accord with His purpose. These may so far outweigh the physical sufferings that we may say with the Biblical writer: "That they are not worthy to be compared with the glory that shall be revealed in us."

We may look upon life as a great opportunity and as Shakespeare phrases it: "There is a tide in the affairs of men which taken at its flood leads on to fortune, but omitted the balance of life may be spent in shallows and in miseries." As an opportunity we may consider it a gift for infinite development.

In considering life in its relation to other creations we would consider it in its adaptations to the world activities and requirements as they revolve around us day by

day, and in which we are required by physical, mental and spiritual construction to function in accordance with these other creations.

We cannot get away from them, nor do we so desire under normal relationships. The normal life is so adapted in family relations, in mental and moral qualifications and relationships, that we would naturally say: "It is good to be here, functioning in all these relations."

It appears that God has honoured man above all other creations in making him a co-worker in development of the world. In the physical creations, the sun, moon, stars and earth, as they came from the hand of God, we can see no marks of man's hand. But as we look further into the great scheme of creation and see the works of man, how he co-operates with the Creator through the laws of chemistry, physics, mathematics and other laws, we marvel at his genius. We see it in the wonderful development in our cities, ocean steamers, transportation systems by land, sea and air, the wonderful help of man in repairing the broken and maimed of mankind; the development in the agricultural, mechanical, industrial and commercial world; the advance in all electrical appliances, surgical helps, his works of art and all lines of communication and in every definite purpose for good. All these are working together for good. At times this silver lining may not be in view, but if we could lift the veil we could see the altruistic Divine purpose throughout.

We can then see that life is one great opportunity and privilege for development and co-operation with the Creator in working out the *summum bonum*, the highest good for mankind for all who respond according to His purpose and co-operate with God.

In considering the goodness of God to mankind we must note the great facts of light and heat. These two phases of the Creator's great provision for mankind are closely related and interwoven into the great scheme looking to man's comfort and are as one with life.

In the study of the principles or elements of physics we find light closely related to electricity as well as heat, since electrical currents in certain relations produce light and heat. But, like electricity, we can see the effects but cannot describe its constituent parts. We have learned, however, that certain light waves travel at a rate of 186,000 miles per second, and that there are lights within the universe, stars and solar systems, whose lights are observed only by the use of telescope, spectroscope, photography and selenium-cell.

The Biblical writer says that two great lights were created: the greater, sun, to rule by day and the lesser, moon, to rule by night. These are the phenomena which we must now consider.

How does light contribute to the welfare of mankind? What is its purpose, and how related to man's life?

We may say that light is the complement of sight, as there could be no sight without light waves from which the eye receives the impression of objects seen. Having created the heavens, the earth and the great lights to rule, the creation of the sense of sight must necessarily follow in order that man could see the wonderful creations and be guided by these lights in all his activities. As all creation without mind would be practically void, so without light and ability to appreciate it the sense of vision would become void, so to speak. In the dark waters of Mammoth Cave, hidden far away from the light of day, the fish in these waters have no vision or sight, the eyes having become sightless, void or atrophied because of

non-use. There is no light to bring into activity the powers of the eye, so, having existed in this condition for a long period of time, the powers are gone and only form is left to mark the place. The eye is without the vision or sight.

Not only is light the medium through which the vision functions and thereby aids man in all his movements and activities, but it carries with itself a healing power, a salutary influence contributing to the general health of mankind. Light and heat may function together in this respect. The light and heat of the flame, playing upon many hidden bacilli or germ-life, remove their deadly effects or so subdue their power of infection that immunity follows.

The various kinds of light, as sunlight and the various kinds of artificial light, gas, electricity and candle-power, all have led the way of man through the darkness in the ages past. But man has always needed the light of the sun in order to preserve sight and cause the sense of vision to function in all its fine adaptations to man's needs.

Light is so necessary to the well-being of man that it has been for ages the synonym for life. Confucius was called the Light of Asia. One of the Biblical writers says in speaking of the Great Teacher: "In him was life and the life was the light of man—the light shineth in darkness and the darkness comprehended it not." And when he spoke of God he said: "Every good and perfect gift comes down from the Father of Lights, and in him is no darkness at all." It would appear therefore that light is so closely associated with the welfare of mankind that it is considered as one with his life. Without life there would be no appreciation of light, and without light the life of man would be im-

measurably dwarfed and his power for usefulness made almost nil.

How beautiful and how exhilarating the light of day as Old Sol climbs the eastern horizon and leads one to exclaim with the Psalmist: "The heavens declare the glory (goodness) of God and the firmament showeth his handiwork. Day unto day uttereth speech and night unto night showeth knowledge. In them hath he set a tabernacle for the sun which is as bridegroom coming out of his chamber; there is no speech or language where their voice is not heard; their line is gone out through all the earth and their circuit unto the ends of it, and there is nothing hid from the heat thereof."

Considering light from the standpoint of utility, we see that all vegetation is stimulated by the light of the sun, and without it all life would wither and die. And by a lessening of it our food supply would be cut short and provision for man's nourishment would fail. But all things must work together for good. As the other benign laws furnish rain, chemical compounds and other nourishing supplies, so the sun must exert the full power of its quota in nourishing rays of light and heat to meet the necessary conditions of supply and demand in harmony with His other creations.

This charm of light is exhilarating to the nervous system, cleansing the atmosphere, weaving into the vision of man and beast colours innumerable yet symmetrical and harmonious, pleasing to the eye and attractive to the point of wonder. Through light the masterpieces of pigment in form of picture, landscape, form and motion-picture, are wrought out showing the benign purpose of the Creator. We also see His goodness in the social, religious, industrial and commercial world through the

wonderful lights created at His command. He said: "Let there be light," and there was light.

"We have spoken of lights which we see and the X-rays to be seen only under cover of darkness and which pass through flesh and stone. But between the X-rays and the clear light of day there are many kinds and shades of light invisible. These waves, too short to affect the eye, can affect the photographic plate, and we can discover in this way the existence of waves only half the length of the deep violet waves." So we have lights visible and invisible, so to speak. But in the other direction we can detect waves of ether longer than the light-waves called the electro-magnetic waves. These waves, such as light, radiant-heat, and electro-magnetic waves, differ only as regards to their length. The power of the eye to see is dependent, evidently, upon the wave motion of the ether, conveying the light.

"Everything in the visible universe is transmitted to us wholly by light-waves arising from the very rapid motions of the inconceivably small particles or electric charges, called electrons, that form essential parts of the atoms or molecules of which all matter is composed, and made known through chemistry and photography.

"Distances expressed in hundreds and thousands of light-years are measured through the effects produced by light whose waves are so short that there are about 50,000 to the linear inch. In addition to the visible radiations, the atoms emit the much shorter waves corresponding to X-rays and also longer ones called heat waves. Electric waves are of similar nature, but are caused by the oscillations of electric charges in bodies larger than atoms. All these waves travel with the same velocity, 186,300 miles per second.

"The unit employed in measuring light waves in the

Angstrom, whose length is one ten-millionth of a millimeter (0.000.000.004 inch). The instruments and methods are so accurate that results correct to less than a hundredth of an Angstrom are obtained."—Astronomical Society of the Pacific.

As before suggested:

Light has a wonderful influence upon plant life as well as upon animal life. The plant sends out its shoots which bend toward the light. And the leaves spread out and twist around to catch the rays of the sun. Thomson says that "Light interferes with the action of gravity on the stem and is the primary cause of leaf movement." "The leaf is formed wide and flat as a rule, with exposure of surface to the light as large as possible, and in colour (green) and in place to absorb or drink in the carbon dioxide, the nourishing food of the plant, from the air." Vegetable life is the great transformer and prepares the foods for animal life.

The leaves, the lungs of the plant, are unable to withstand the frosts of winter, but the seed containing the life germ is built and protected even when dried up so that its vital activities are reduced to a minimum, and with its close, protected coat can resist the coldest temperature of the winter. It can withstand heat also, and its life is preserved through decades.

It is said that the power of man to produce light is an index of his progress in ascent from the lower to the higher. As Sir William Crooks says: "From the primitive torch to the paraffine candle, how wide an interval between them, how vast a contrast. The means adopted by man to illuminate his home at night stamps at once his position in the scale of civilization. The fluid bitumen of the far east, the Etruscan lamp; the whale, seal or bear fat filling the hut of the Eskimo or Lapp with

odour rather than light; the huge wax candle on the glittering altar, the range of gas lamps on our streets, all have their stories to tell. All, if they could speak, might warm our hearts in telling how they have ministered to man's comfort, love of home, toil and devotion." These may be mentioned also as in contrast with the modern incandescent lamp and the electric-lighting systems.

The poet says and sings:

The night has a thousand eyes,
And the day but one;
Yet the light of the bright world dies,
With the dying sun.

The mind has a thousand eyes,
And the heart but one;
Yet the light of a whole life dies,
When love is done.

FRANCIS W. BOURDILLON.

TOPICAL SUGGESTIONS:

1. The normal, physical, mental and spiritual life of man as seen within the three score and ten years.
2. Life a great opportunity. Suffering may be a guide.
3. Our great Creator honours man in making him a co-worker in developing the world. The earth and solar systems show no marks of man's hand, but the vegetable kingdom and the wonderful achievements in the industrial world show co-operation.
4. Light and heat. Light the complement of sight. All a void without light.
5. Light not only a purifier of the atmosphere but gives color which delights the eyes.
6. The utilities of light.
7. The exhilarating effects of light.
8. Harmonies of nature observed through light.

XXII

THE ELEMENTS

THE elements, commonly known by the ancients as earth, air, fire and water, but scientists would probably add another to this list called ether which pervades all the elements and saturates all life or known existence, conveying light to the eye.

Under Geology we have treated in a small way the strata of the earth, so we will pass on to the next element called Air. This element, treated chemically, will show the formula Oxygen and Nitrogen, with a small mixture of carbon dioxide.

Air appears to be the substance above all others necessary at all times to keep man and beast alive, so important is this to our very lives that God in His goodness has provided it without stint, and, like the rain, is enjoyed by the just and unjust alike. It does not require any argument to show that in this element, air, there is a constant reminder that life is hanging, as it were, upon a slender thread. Air through the lungs in moving, never-ending process of absorption and assimilation and expulsion receiving and absorbing the oxygen, nitrogen, casting out the carbon dioxide contributes to the physical body the necessary particles to enrich the blood and preserve life. Man scarcely begins to live before he begins to breathe, and must continue to function, using the air as a means of preserving life.

It is also the vehicle of sound to the ear without which

this kind censor could not function. The wave motion is long and very slow in comparison with the wave motion of the ether which conveys light. Light travels at the rate of 186,000 miles per second, while sound travels 1,000 feet per second.

The receptacles of the ear are finely adjusted to the density and wave motions of the atmosphere and sound, while the delicate organs of vision or sight are just as finely adjusted to the medium, ether which conveys the wave motions of light to the eye.

So in all our relations of life air is the medium conveying the healing and life-giving stream of life to the lungs, both when asleep and awake, acting automatically by pressure to suit the delicate organs. So in the pleasures of life, as the sense of hearing functions in music, song or thunder warnings, air is the great outstanding vehicle contributing to the welfare of mankind.

Then Fire, another of these wonderful gifts to man, finds a large place in man's life. It may be found in the field of chemistry, marking the combustion of gases as they play upon each other in the experimental laboratory or in the home in domestic life as food is prepared in the kitchen; in the mill or foundry where the liquid metals are poured and moulded and pressed into form, or in the incinerator where the refuse of cities and towns reach their final quietus through fire; or under the boiler to produce steam for running machinery of mill and factory, or in the illuminations of town or city, this great gift to man is always ready as a handmaid and helper to man. It is so useful, yet so deadly in its functioning, that colour, the red signal of danger, always marks its approach.

With the coming of electricity as a great factor in the affairs of man, and in the generating of this power, we

find fire as a factor in producing the steam to operate the machinery where such power is needed. In the coal fields and industrial sections, in the lumber camps and forest, in the great cities in their lighting and power systems, in our railroad and transportation systems by land and sea, the use of electricity generated by fire brings man face to face with nature's wonders, and one would say with the Hebrew writer:

"Wonderful are thy works, oh Lord, and thy ways past finding out."

Then we must consider water as another element contributing to the welfare of man.

The chemical formula H_2O is the most common, aside from air and ether, in its proximity and use. It is so common that two-thirds of the earth's surface is covered with water, river, lake, sea and ocean; the waters bear the commerce of the world and furnish the means by which man can circumnavigate the earth. It is so common that we scarcely appreciate its contribution to our immediate welfare. Without water the great western hemisphere might have remained undiscovered to this day. With the discovery of steam a new civilization was projected. The application of the power of steam or the expansive power of water gave a new impetus to the machinery of to-day, which may be considered man's handmaid and industrial helpmeet in all its relations, assisting in practically all of man's appliances of a mechanical nature.

In domestic life it is of course indispensable. In preparation of food, in sanitation and purification, in medicinal and surgical applications, in flushing not only the sewers of the city, but the sewerage system of the physical body, as well as cleansing the outward body. In all these relations, adaptations and purposes, in the

use of water the goodness of God is manifest. But we may show you yet other ways, in vegetable and animal life. In the rainfall and dewdrop to soften the soil in agriculture we see that water contributes, not only to his welfare but is absolutely necessary to man's existence.

As the elements above mentioned are so intimately connected with our lives and are found so necessary to our existence, may we not yet find, as we look into the Creator's great works, a more wonderful contribution to man's welfare in the unseen, yet penetrating power called ether?

As ether is the vehicle by which light travels and reaches the human eye, may we not reason that the great universe is a vast unfathomable ocean of ethereal life, as yet little understood by mankind?

As there are many stars, suns and systems whose light has yet to strike our vision and press their influences upon our planet, may we not reasonably imagine that the benign influences yet to penetrate the mist and spread the light, may so quicken our mental and spiritual perceptions that we shall see more clearly the benign hand of God in all creation?

As the Psalmist suggests: "The heavens declare the glory (goodness) of God, and the firmament sheweth his handiwork, day unto day uttereth speech and night unto night sheweth knowledge, there is no speech nor language where their voice is not heard."

This would indicate that God is appealing to man and teaching us through the wonderful creations and their benign influences trying to show us His wonderful goodness. When the light and influences of these far-away spheres reach us, may not their appeal be irresistible? The closing verse of the 107th Psalm says: "Whoso is wise and will observe these things even they shall know

of the loving-kindness of God!" When the loving-kindness of God, manifest every day in all creation, is thoroughly comprehended by man, the appeal will certainly be irresistible.

The unfathomable universe is one vast and tremendous appeal to man to understand His loving-kindness.

As light and heat cause molecular movements in matter, and as the mind and body of man are subject to these influences as indicated by the shades of the colour of face when in a rage or under the joyous spell of good-fellowship, white or red in anger, glowing with kindness in good-fellowship; in fear a pale and frightened appearance; in joy a clean healthy glow; in worry a languid, sallow face; in happy mind a ruddy, cheerful countenance. In fact, there may yet be developed a chemistry of character which may show the character by the colour of face, brightness of the eye, the clearness of vision, and the many other marks of face and life indicative of life and character.

As we study these things under the light of truth we can see that the Great Teacher's warnings were apropos:

Do not worry, do not fear, do not hate, all of these poison the body, system and constitution of man, producing a chemical change in the blood and body, causing a poison to permeate the life and make it difficult to function. Fear will cause the hair to turn gray in a night; worry upsets the stomach and whole nervous system; hate poisons the mind and body.

An illustration may be apropos; the following story came to the writer sometime ago: A young lady, very nervous and with unhappy state of mind, visited many physicians for relief. But none could help her, until finally she visited one who questioned her in regard to her disposition and relationships. Among other ques-

tions he asked: "Do you hate anybody?" Her answer was: "Yes, I hate my sister with the most bitter hatred." The physician then advised her to go and become reconciled to her sister, then come back and talk with him. The lady decided to take the advice of the kind physician, became reconciled to her sister and again learned to love her. Her health returned and she found other treatment unnecessary.

In life and under the influences of light divine we can understand although we may not yet comprehend that "all things work together for good" to all who respond according to His purpose.

At the entrance to the harbour of New York there stands the great Statue of Liberty enlightening the world, holding up the torch or light as symbolical of liberty, truth and enlightenment, which are among the higher ideals of Americanism.

Ether is considered one of the fundamental entities of the universe. There is no such thing as empty space. Ether pervades every particle of matter and animal life. With matter and energy it may constitute an essential oneness of the universe, yet operating or functioning through matter, mind and spirit. "Nature abhors a vacuum." That is unless Einstein's theory should be proven correct and true.

Thomson says: "The invisible medium through which the waves of light travel is the ether, and this ether permeates all space and all matter. Between us and the stars stretch vast regions, empty of all matter. But we see the stars; their light reaches us even though it may take centuries to do so. We conceive then that it is the universal ether which conveys the light. All the energy which has reached the earth from the sun, and which stored for ages in our coal fields, is now used to

propel our trains and steamships, to heat and light our cities, and to perform all the multifarious tasks of modern life, was conveyed by ether. Without that universal carrier of energy we should have nothing but a stagnant, lifeless world."

"Nature divides living beings into those who are arriving and those who are departing. Those who are departing are turned towards the shadows; those who are arriving towards the light. The tread at first insensible, increases slowly like all separation of branches—the boughs without becoming detached from the trunk grow away from it. It is no fault of theirs. Young people feel the cooling off of life. Old people that of the tomb."—HUGO.

"Happiness desires that all the world should be happy."

TOPICAL SUGGESTIONS:

1. Earth, air, fire, water and ether commonly called the elements. The earth treated under geology.
2. Air necessary for preservation of life, enriches the blood, the vehicle of sound and contributes to man's happiness in musical harmonies.
3. Fire, useful in home domestic life, industrial life, chemical laboratories, the commercial world, in movements of machinery and producing many kinds of power, such as steam and electricity.
4. Water, moisture in air, rain, two-thirds of earth covered by water. Means of transportation and necessary to civilization.
5. Ether-waves carry light 186,000 miles per second. Necessary to all visual observation, study of astronomy and all phases of light reflections and colours.
6. Electricity as feature of light and heat.
7. Character may be observed by colour and chemical changes of the physical body.
8. Healing and disintegrating effects of moods and character.

PART VI
Quotations from the Psalms

XXIII

POWER AND MAJESTY

THE fool hath said in his heart there is no God.
(Psalm LIII.)

1. The heavens declare the glory (goodness) of God and the firmament sheweth his handiwork.

2. Day unto day uttereth speech and night unto night sheweth knowledge.

3. There is no speech nor language where their voice is not heard.

4. Their line is gone out through all the earth and their words unto the end of the world. In them hath he set a tabernacle for the sun.

5. Which is as a bridegroom coming out of his chamber, and rejoiceth as a strong man to run a race.

6. His going forth is from the end of the heaven, and his circuit unto the ends of it: and there is nothing hid from the heat thereof. (Psalm XIX.)

3. When I consider thy heavens, the work of thy fingers, the moon and the stars, which thou hast ordained;

4. What is man that thou are mindful of him and the son of man that thou visitest him?

5. For thou hast made him a little lower than the angels, and hast crowned him with glory and honour.

6. Thou madest him to have dominion over the works of thy hands; thou hast put all things under his feet:

7. All sheep and oxen, yea, and the beasts of the field;

8. The fowl of the air, and the fish of the sea, and

whatsoever passeth through the paths of the seas.
(Psalm VIII.)

1. The mighty God, even the Lord, hath spoken, and called the earth from the rising of the sun unto the going down thereof.

4. He shall call to the heavens, from above and to the earth that he may judge his people.

6. And the heavens shall declare his righteousness.
(Psalm L.)

1. O Lord, our Lord, how excellent is thy name in all the earth, who hast set thy glory above the heavens.
(Psalm VIII.)

1. The earth is the Lord's and the fullness thereof; the world and they that dwell therein;

2. For he hath founded it upon the seas and established it upon the floods. (Psalm XXIV.)

10. For every beast of the forest is mine, and the cattle upon a thousand hills.

11. I know all the fowls of the mountains: and the wild beasts of the field are mine.

12. If I were hungry I would not tell thee: for the world is mine and the fullness thereof. (Psalm L.)

1. O Lord my God, thou art very great: thou art clothed with honour and majesty,

2. Who coverest thyself with light as with a garment: who stretchest out the heavens like a curtain;

3. Who maketh the clouds his chariot: who walketh upon the wings of the wind.

5. Who laid the foundations of the earth that it should not be removed forever.

6. Thou coveredst it with the deep as with a garment: the waters stood above the mountains.

8. They go up by the mountains; they go down by the valleys unto the place which thou hast founded for them.

9. Thou hast set a bound that they may not pass over.

10. He sendeth the springs into the valleys, which run among the hills.

12. By them shall the fowls of the heaven have their habitation, which sing among the branches.

13. The earth is satisfied with the fruit of thy works.

14. He causeth the grass to grow for the cattle, and herb for the service of man; that he may bring forth food out of the ground. (Psalm CIV.)

9. And all men shall fear, and shall declare the work of God; for they shall wisely consider of his doing. (Psalm LXIV.)

6. Which by his strength setteth fast the mountains, being girded with power.

9. Thou visitest the earth and waterest it. Thou greatly enrichest it with the river of God, which is full of water: thou preparest them corn, when thou hast so provided.

11. Thou crownest the year with thy goodness; and thy paths drop fatness. (Psalm LXV.)

8. He shall have dominion also from sea to sea, and from the river unto the ends of the earth.

17. His name shall endure forever, his name shall be

continued as long as the sun: all nations shall call him blessed.

19. Blessed be his glorious name forever; and let the whole earth be filled with his glory. (Loving-kindness.) (Psalm LXXII.)

16. The day is thine, the night also is thine; thou hast prepared the light and the sun.

17. Thou hast set all the borders of the earth: thou hast made summer and winter. (Psalm LXXIV.)

12. I will meditate also of all thy work, and talk of thy doings.

14. Thou art the God that doest wonders: thou hast declared thy strength among the people.

18. The voice of thy thunders was in the heaven: the lightnings lightened the world, the earth trembled and shook.

19. Thy way is in the sea, and thy path in the great waters, and thy footsteps are not known. (Psalm LXXVII.)

12. Yea, the Lord shall give that which is good; and our land shall yield her increase. (Psalm LXXXV.)

5. For thou, Lord, art good and ready to forgive, and plenteous in mercy unto all them that call upon thee.

9. All nations whom thou hast made shall come and worship before thee, O Lord, and shall glorify thy name.

10. For thou art great and doest wondrous things: thou art God alone.

15. But thou, O Lord, art a God full of compassion

and gracious, long-suffering and plenteous in mercy and truth. (Psalm LXXXVI.)

5. And the heavens shall praise thy wonders, O Lord.

6. For who in the heavens can be compared unto thee? Who among the sons of the mighty can be likened unto the Lord?

11. The heavens are thine, the earth also is thine: as for the world and the fullness thereof, thou hast founded them.

12. The north and the south thou hast created them.

14. Justice and judgment are the habitation of thy throne: mercy and truth shall go before thy face.

15. Blessed is the people that know the joyful sound: and shall walk, O Lord, in the light of thy countenance.

17. For thou art the glory of their strength. (Psalm LXXXIX.)

1. Lord, thou hast been our dwelling place in all generations.

2. Before the mountains were brought forth, or ever thou hadst formed the earth and the world, even from everlasting to everlasting thou art God.

4. For a thousand years in thy sight are but as yesterday when it is past, and as a watch in the night.

9. We spend our years as a tale that is told. (Psalm XC.)

12. The righteous shall flourish like the palm tree, he shall grow like a cedar in Lebanon.

13. Those that be planted in the house of the Lord shall flourish in the courts of our God. (Psalm XCII.)

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9. He that planted the ear, shall he not hear? he that formed the eye, shall he not see?

10. He that chastiseth the heathen, shall not he correct? he that teacheth man knowledge, shall not he know?

17. Unless the Lord had been my help, my soul had almost dwelt in silence. (Psalm XCIV.)

3. For the Lord is a great God;

4. In his hands are the deep places of the earth; the strength of the hills is his also.

5. The sea is his and he made it, and his hands formed the dry land.

7. For he is our God and we are the people of his pasture, and the sheep of his hand. (Psalm XCV.)

5. But the Lord made the heavens.

6. Honour and majesty are before him: strength and beauty are in his sanctuary.

11. Let the heavens rejoice, and let the earth be glad: let the sea roar and the fullness thereof.

12. Let the field be joyful, and all that is therein; then shall all the trees of the wood rejoice.

13. He shall judge the world with righteousness, and the people with his truth. (Psalm XCVI.)

1. The Lord reigneth; let the earth rejoice; let the multitude of isles be glad thereof.

2. Clouds and darkness are round about him; righteousness and judgment are the habitation of his throne.

4. His lightnings enlightened the world: the earth saw, and trembled.

6. The heavens declare his righteousness; and all the people see his glory.

11. Light is sown for the righteous, and gladness for the upright in heart.

12. Rejoice in the Lord ye righteous and give thanks at the remembrance of his holiness. (Psalm XCVII.)

3. Know ye that the Lord he is God, it is he that hath made us and not we ourselves, we are his people and the sheep of his pasture. (Psalm C.)

25. Of old hast thou laid the foundation of the earth: and the heavens are the work of thy hand.

26. They shall perish, but thou shalt endure: yea, all of them shall wax old like a garment; as a vesture shalt thou change them and they shall be changed.

27. But thou art the same, and thy years shall have no end.

28. The children of thy servants shall continue, and their seed shall be established before thee. (Psalm CII.)

2. And forget not all his benefits.

3. Who forgiveth all thine iniquities, who healeth all thy diseases.

4. Who redeemeth thy life from destruction; who crowneth thee with loving-kindness and tender mercies;

5. Who satisfieth thy mouth with good things; so that thy youth is renewed like the eagle's.

6. The Lord executeth righteousness and judgment for all that are oppressed.

8. The Lord is merciful and gracious, slow to anger and plenteous in mercy.

11. For as the heaven is high above the earth, so great is his mercy toward them that fear him.

12. As far as the east is from the west, so far hath he removed our transgressions from us.

13. Like as a father pitieth his children, so the Lord pitieth them that fear him.

14. For he knoweth our frame, he remembereth that we are dust.

17. But the mercy of the Lord is from everlasting to everlasting upon them that fear him, and his righteousness unto children's children. (Psalm CIII.)

1. O Lord, my God, thou art very great; thou art clothed with honour and majesty.

2. Who covereth thyself with light as with a garment: who stretchest out the heavens like a curtain.

16. The trees of the Lord are full of sap; the cedars of Lebanon, which he hath planted;

17. Where the birds make their nests; as for the stork, the fir trees are her house.

18. The high hills are a refuge for the wild goats; and the rocks for the conies.

19. He appointed the moon for seasons; the sun knoweth his going down.

20. Thou makest darkness, and it is night: wherein all the beasts of the forest do creep forth.

21. The young lions roar after their prey, and seek their meat from God.

22. The sun ariseth, they gather themselves together, and lay them down in their dens.

23. Man goeth forth unto his work and to his labour until evening.

24. O Lord, how manifold are thy works! in wisdom hast thou made them all: the earth is full of thy riches.

25. So is this great and wide sea, wherein are things creeping innumerable, both small and great beasts.

26. Therein go the ships; there is that leviathan whom thou hast made to play therein.

27. These wait upon thee, that thou mayest give them their meat in due season.

28. That thou givest them they gather: thou openest thine hand, they are filled with good.

29. Thou hidest thy face, they are troubled: thou takest away their breath, they die, and return to their dust.

30. Thou sendest forth thy spirit, they are created: and thou renewest the face of the earth.

31. The glory of the Lord shall endure forever: the Lord shall rejoice in his works. (Psalm CIV.)

5. Remember his marvellous works that he hath done; his wonders, and the judgments of his mouth. (Psalm CV.)

2. Who can utter the mighty acts of the Lord? who can shew forth all his praise? (Psalm CVI.)

9. For he satisfieth the longing soul and filleth the hungry soul with goodness.

29. He maketh the storm a calm, so that the waves thereof are still.

30. Then are they glad because they be quiet; so he bringeth them unto their desired haven. (Psalm CVII.)

16. The heaven, even the heavens are the Lord's but the earth hath he given to the children of man. (Psalm CXV.)

90. Thou hast established the earth and it abideth. (Psalm CXIX.)

6. Such knowledge is too wonderful for me; it is high, I cannot attain unto it.

7. Whither shall I go from thy spirit? or whither shall I flee from thy presence?

8. If I ascend up into heaven, thou art there: if I make my bed in hell, behold thou art there.

9. If I take the wings of the morning, and dwell in the uttermost parts of the sea;

10. Even there shall thy hand lead me, and thy right hand hold me.

11. If I say, surely the darkness shall cover me; even the night shall be light about me.

12. Yea, the darkness hideth not from thee: but the night shineth as the day: the darkness and the light are both alike to thee.

14. I will praise thee; for I am fearfully and wonderfully made: marvellous are thy works; and that my soul knoweth right well.

15. My substance was not hid from thee.

16. And in thy book all my members were written; which in continuance were fashioned when as yet there was none of them.

17. How precious are thy thoughts also unto me, O God, how great is the sum of them.

18. If I should count them, they are more in number than the sand. (Psalm CXXXIX.)

15. Happy is that people, whose God is the Lord. (Psalm CXLIV.)

6. Which made heaven and earth, the sea, and all that therein is, which keepeth truth forever. (Psalm CXLVI.)

4. He telleth the number of the stars; he calleth them by their names.

5. His understanding is infinite.

8. Who covereth the heaven with clouds, who prepareth rain for the earth, who maketh grass to grow upon the mountains.

9. He giveth to the beast his food, and to the young ravens which cry.

16. He giveth snow like wool: he scattereth the hoar frost like ashes.

17. He casteth forth his ice like morsels: who can stand before the cold?

18. He sendeth out his word, and melteth them, he causeth his wind to blow, and the waters flow. (Psalm CXLVII.)

9. The Lord is good to all: and his tender mercies are over all his works.

11. They shall speak of the glory of thy kingdom and talk of thy power.

13. Thy kingdom is an everlasting kingdom, and thy dominion endureth throughout all generations.

16. Thou openest thine hand, and satisfieth the desire of every living thing. (Psalm CXLV.)

31. Oh that men would praise the Lord for his goodness, and for his wonderful works to the children of men.

42. The righteous shall see it and rejoice.

43. Whoso is wise and will observe these things, even they shall know of the loving-kindness of God. (Psalm CVII.)

XXIV

CHARACTER OF GOD (LOVING-KINDNESS)

A BRUTISH man knoweth not: neither doth a fool understand this. (Psalm XCII-6.)

1. Blessed is the man that walketh not in the counsel of the ungodly, nor standeth in the way of sinners, nor sitteth in the seat of the scornful.

2. But his delight is in the law of the Lord, and his law doth he meditate day and night.

3. And he shall be like a tree planted by the rivers of water, that bringeth forth his fruit in his season, his leaf also shall not wither and whatsoever he doeth shall prosper.

4. The ungodly are not so but are like the chaff which the wind driveth away.

5. Therefore the ungodly shall not stand in the judgment, nor sinners in the congregation of the righteous.

6. For the Lord knoweth the way of the righteous, but the way of the ungodly shall perish. (Psalm I.)

1. The Lord is my shepherd, I shall not want.

2. He maketh me to lie down in green pastures; he leadeth me beside the still waters.

3. He restoreth my soul: he leadeth me in the paths of righteousness for his name's (loving-kindness) sake.

4. Yea, though I walk through the valley of the shadow of death, I will fear no evil: for thou art with me, thy rod and thy staff they comfort me.

5. Thou preparest a table before me in the presence of mine enemies: thou anointest my head with oil, my cup runneth over.

6. Surely goodness and mercy shall follow me all the days of my life, and I will dwell in the house of the Lord for ever. (Psalm XXIII.)

10. And they that know thy name (loving-kindness) will put their trust in thee: for thou, Lord, hast not forsaken them that seek thee. (Psalm IX.)

17. Thou wilt prepare their heart, thou wilt cause thine ear to hear. (Psalm X.)

25. With the merciful thou wilt show thyself merciful: with the upright thou wilt show thyself upright.

26. With the pure thou wilt show thyself pure. (Psalm XVIII.)

7. The law of the Lord is perfect, converting the soul, the testimony of the Lord is sure making wise the simple.

8. The statutes of the Lord are right, rejoicing the heart: the commandment of the Lord is pure, enlightening the eyes.

9. The fear of the Lord is clean, enduring forever: the judgments of the Lord are true and righteous altogether.

10. More to be desired are they than gold, yea, than much fine gold: sweeter also than honey and the honeycomb.

11. Moreover by them is thy servant warned and in keeping of them there is great reward. (Psalm XIX.)

7. Some trust in chariots, and some in horses: but we will remember the name (loving-kindness) of the Lord our God. (Psalm XX.)

26. The meek shall eat and be satisfied: they shall praise the Lord that seek him, your heart shall live forever. (Psalm XXII.)

12. What man is he that feareth the Lord? him shall he teach in the way that he shall choose.

13. His soul shall dwell at ease: and his seed shall inherit the earth.

14. The secret of the Lord is with them that fear him: and he will show them his covenant. (Psalm XXV.)

3. But know that the Lord hath set apart him that is godly for himself: the Lord will hear when I call unto him.

4. Stand in awe and sin not: commune with your own heart upon your bed, and be still.

5. Offer the sacrifices of righteousness, and put your trust in the Lord.

8. I will both lay me down in peace, and sleep, for thou, Lord, only makest me dwell in safety. (Psalm IV.)

11. But let all those that put their trust in thee rejoice: let them even shout for joy, because thou defendest them: let them also that love thy name (loving-kindness) be joyful in thee.

12. For thou, Lord, wilt bless the righteous: with favour wilt thou compass him as with a shield. (Psalm V.)

10. And they that know thy name (loving-kindness) shall put their trust in thee. (Psalm IX.)

17. Thou wilt prepare their heart: thou wilt cause thine ear to hear. (Psalm X.)

1. Lord, who shall abide in thy tabernacle? Who shall dwell in thy holy hill?

2. He that walketh uprightly and worketh righteousness and speaketh the truth in his heart,

3. He that backbiteth not with his tongue, nor doeth evil to his neighbour, nor taketh up a reproach against his neighbour,

4. In whose eyes a vile person is contemned; but he honoureth them that fear the Lord. He that sweareth to his own hurt, and changeth not,

5. He that putteth not out his money to usury, nor taketh reward against the innocent. He that doeth these things shall never be moved. (Psalm XV.)

5. The Lord is the portion of mine inheritance and of my cup: Thou maintainest my lot.

6. The lines are fallen unto me in pleasant places: yea, I have a goodly heritage.

11. Thou wilt show me the path of life: In thy presence is fullness of joy, at thy right hand there are pleasures forever more. (Psalm XVI.)

12. Blessed is the nation whose God is the Lord: and the people whom he hath chosen for his own inheritance. (Psalm XXXIII.)

15. As for me, I will behold thy face in righteousness: I shall be satisfied when I awake with thy likeness. (Psalm XVII.)

10. When my father and my mother forsake me, then the Lord will take me up.

13. I had fainted unless I had believed to see the goodness of the Lord in the land of the living.

14. Wait on the Lord: be of good courage, and he shall strengthen thine heart: wait I say on the Lord. (Psalm XXVII.)

7. My heart trusted in him, and I am helped: therefore my heart rejoiceth and with song will I praise him.

8. The Lord is their strength, and he is the saving strength of his anointed. (Psalm XXVIII.)

11. The Lord will give strength unto his people, the Lord will bless his people with peace. (Psalm XXIX.)

5. In his favour is life: weeping may endure for a night, but joy cometh in the morning. (Psalm XXX.)

19. Oh how great is thy goodness, which thou hast laid up for them that fear thee: which thou hast wrought for them that trust in thee before the sons of men.

24. Be of good courage, and he shall strengthen your heart, all ye that hope in the Lord. (Psalm XXXI.)

2. Blessed is the man unto whom the Lord imputeth not iniquity, and in whose spirit there is no guile.

11. Be glad in the Lord and rejoice, ye righteous: and shout for joy, all ye that are upright in heart. (Psalm XXXII.)

7. The angel of the Lord encampeth round about them that fear him, and delivereth them.

8. Blessed is the man that trusteth in him.

9. For there is no want to them that fear him.

10. The young lions may lack and suffer hunger: but they that seek the Lord shall not want any good thing.

12. What man is he that desireth life, and loveth many days, that he may see good?

13. Keep thy tongue from evil, and thy lips from speaking guile.

14. Depart from evil and do good: Seek peace and pursue it.

22. The Lord redeemeth the soul of his servants: and none of them that trust in him shall be desolate. (Psalm XXXIV.)

7. How excellent is thy loving-kindness, O God, therefore the children of men put their trust under the shadow of thy wings.

8. And thou shalt make them drink of the river of thy pleasures.

9. For with thee is the fountain of life: in thy light shall we see light. (Psalm XXXVI.)

1. Fret not thyself because of evil doers, neither be thou envious against the workers of iniquity.

2. For they shall soon be cut down like the grass, and wither as the green herb.

3. Trust in the Lord and do good: so shalt thou dwell in the land and verily thou shalt be fed.

4. Delight thyself also in the Lord, and he shall give thee the desires of thine heart.

5. Commit thy way unto the Lord; trust also in him; and he shall bring it to pass.

6. And he shall bring forth thy righteousness as the light and thy judgment as the noonday.

7. Rest in the Lord and wait patiently for him: fret not thyself because of him who prospereth in his way, because of the man who bringeth wicked devices to pass.

8. Cease from anger and forsake wrath; fret not thyself in any wise to do evil.

9. For evil doers shall be cut off; but those that wait upon the Lord they shall inherit the earth.

11. But the meek shall inherit the earth; and shall delight themselves in the abundance of peace.

16. A little that the righteous man hath is better than the riches of many wicked.

18. The Lord knoweth the ways of the upright; and their inheritance shall be forever.

22. For such as be blessed of him shall inherit the earth.

23. The steps of a good man are ordered by the Lord: and he delighteth in his way.

24. Though he fall, he shall not be utterly cast down; for the Lord upholdeth him with his hand.

25. I have been young, and now I am old; yet have I not seen the righteous forsaken, nor his seed begging bread.

26. He is merciful and lendeth: and his seed is blessed.

27. Depart from evil, and do good; and dwell for evermore.

29. The righteous shall inherit the land, and dwell therein forever.

34. Wait on the Lord, and keep his way, and he shall exalt thee to inherit the land.

35. I have seen the wicked in great power, and spreading himself like a green bay tree.

36. Yet he passed away, and lo, he was not, yea, I sought him, but he could not be found.

37. Mark the perfect man, and behold the upright: for the end of that man is peace.

39. He is their strength in time of trouble.

40. And the Lord shall help them, and deliver them because they trust in him. (Psalm XXXVII.)

1. I waited patiently for the Lord; and he inclined unto me, and heard my cry.

3. And he hath put a new song in my mouth, even praises to our God: Many shall see it and fear, and shall trust in the Lord.

4. Blessed is he that maketh the Lord his trust.

5. Many, O Lord, my God, are thy wonderful works which thou hast done, and thy thoughts which are to us-ward: they cannot be reckoned in order unto thee: if I would declare and speak of them, they are more than can be numbered. (Psalm XL.)

1. God is our refuge and strength, a very present help in trouble. (Psalm XLVI.)

14. Offer unto God thanksgiving, and pay thy vows unto the most high.

15. And call upon me in the day of trouble, I will deliver thee, and thou shalt glorify me. (Psalm L.)

22. Cast thy burden upon the Lord, and he shall sustain thee: he shall never suffer the righteous to be moved. (Psalm LV.)

11. In God I have put my trust: I will not be afraid what man can do unto me. (Psalm LVI.)

10. For thy mercy is great unto the heavens, and thy truth unto the clouds. (Psalm LVII.)

4. I will abide in thy tabernacle forever; I will trust in the covert of thy wings. (Psalm LXI.)

11. God hath spoken once; twice have I heard this; that power belongeth unto God.

12. Also unto thee, O Lord, belongeth mercy; for thou renderest every man according to his work. (Psalm LXII.)

3. Because thy loving-kindness is better than life, my lips shall praise thee.

5. And my mouth shall praise thee with joyful lips.

6. When I remember thee upon my bed, and meditate on thee in the night watches.

7. Because thou hast been my help, therefore in the shadow of thy wings will I rejoice. (Psalm LXIII.)

10. The righteous shall be glad in the Lord, and shall trust in him; and all the upright in heart shall glory. (Psalm LXIV.)

3. But let the righteous be glad, let them rejoice before the Lord: yea, let them exceedingly rejoice.

4. Sing unto God, sing praises to his name: extol him that rideth upon the heavens, and rejoice before him.

5. A father of the fatherless, and a judge of the widows, is God in his holy habitation.

6. God setteth the solitary in families: he bringeth out those which are bound in chains.

13. Though ye have lain among the pots, yet shall ye be as the wings of a dove covered with silver, and her feathers with yellow gold.

19. Blessed is the Lord who daily loadeth us with benefits. (Psalm LXVIII.)

28. But it is good for me to draw near to God, I have put my trust in the Lord God, that I may declare all thy works. (Psalm LXXIII.)

10. For a day in thy courts is better than a thousand. I had rather be a doorkeeper in the house of my God than to dwell in the tents of wickedness.

11. For the Lord is a sun and shield, the Lord will give grace and glory: no good thing will be withheld from them that walk uprightly.

12. O Lord of hosts, blessed is the man that trusteth in thee. (Psalm LXXXIV.)

11. Truth shall spring out of the earth.

12. Yea, the Lord shall give that which is good; and our land shall yield her increase.

13. Righteousness shall go before him; and shall set us in the way of his steps. (Psalm LXXXV.)

1. He that dwelleth in the secret place of the most high shall abide under the shadow of the Almighty.

2. I will say of the Lord, He is my refuge and my fortress, my God; in him will I trust.

3. Surely he shall deliver thee from the snare of the fowler, and from the noisome pestilence.

4. He shall cover thee with his feathers, and under

his wings shalt thou trust; his truth shall be thy shield and buckler.

5. Thou shalt not be afraid for the terror by night; nor for the arrow that flieth by day;

6. Nor for the pestilence that walketh in darkness; nor for the destruction that wasteth at noonday.

7. A thousand shall fall at thy side, and ten thousand at thy right hand; but it shall not come nigh thee.

8. Only with thine eyes shalt thou behold and see the reward of the wicked.

9. Because thou hast made the Lord, which is my refuge, even the Most High thy habitation.

10. There shall no evil befall thee, neither shall any plague come nigh thy dwelling.

11. For he shall give his angels charge over thee, to keep thee in all thy ways.

12. They shall bear thee up in their hands, lest thou dash thy foot against a stone.

13. Thou shalt tread upon the lion and adder: the young lion and the dragon shalt thou trample under feet.

14. Because he hath set his love upon me therefore will I deliver him: I will set him on high, because he hath known my name.

15. He shall call upon me, and I will answer him: I will be with him in trouble, I will deliver him, and honour him.

16. With long life will I satisfy him, and show him my salvation. (Psalm XCI.)

1. It is a good thing to give thanks unto the Lord, and to sing praises unto thy name (loving-kindness), O Most High.

2. To shew forth thy loving-kindness in the morning, and thy faithfulness every night.

4. For thou, Lord, hast made me glad through thy works: I will triumph in the work of thy hands.

5. O Lord, how great are thy works and thy thoughts are very deep.

6. A brutish man knoweth not; neither doth a fool understand this.

12. The righteous shall flourish like the palm tree: he shall grow like a cedar in Lebanon.

13. Those that be planted in the house of the Lord shall flourish in the courts of our God.

14. They shall still bring forth fruit in old age; they shall be fat and flourishing. (Psalm XCII.)

1. Make a joyful noise unto the Lord, all ye lands,

2. Serve the Lord with gladness: come before his presence with singing.

4. Enter into his gates with thanksgiving, and into his courts with praise: be thankful unto him, and bless his name (loving-kindness).

5. For the Lord is good, his mercy is everlasting and his truth endureth unto all generations. (Psalm C.)

10. The fear of the Lord is the beginning of wisdom: a good understanding have all they that do his commandments, his praise endureth forever. (Psalm CXI.)

9. Wherewithal shall a young man cleanse his way? by taking heed thereto according to thy word.

14. I have rejoiced in the way of thy testimonies, as much as in all riches.

15. I will meditate in thy precepts, and have respect unto thy ways.

16. I will delight myself in thy statutes: I will not forget thy word. (Psalm CXIX—Beth.)

PART VII
Psychology of "The Fourth 'R'"

XXV

LAW OF RIGHT RELATIONS

THE law of the highest spiritual life was laid down by the Great Teacher when He said, in answer to the question of the lawyer on a certain occasion, "Which is the great commandment?" "Thou shalt love the Lord, thy God," etc., and the second is like unto it, "Thou shalt love thy neighbour," etc. "On these two commandments hang all the law and the prophets." Therefore these two commandments embrace the constitution.

This same constitution was proclaimed when Jesus was born, "glory (honour) to God and good-will among men."

Men honour God because He is good.

Men love their neighbour because of the same spirit within.

The same constitution was proclaimed by Moses in the ten commandments. First to fourth commandments, honour and duties to God. Fifth to tenth commandments, honour and duties to men.

The same constitution or basis of right relations was recognized by George Washington when he took the oath of office in founding the Republic. He placed his hand upon the Scripture passage, Micah 6th chapter and 8th verse.

Warren G. Harding, when he took the oath of office, in the new order looking to a permanent peace of the world, placed his hand upon the same Scripture passage,

Micah 6th chapter and 8th verse, "What doth the Lord require of thee, but to do justly and to love mercy, and walk humbly with thy God?"

In Abraham Lincoln's second Inaugural Address you will find that he was moved by this same fundamental law when he uttered those memorable words, "With malice towards none and charity for all, with firmness in the right as God gives us to see the right, let us strive on to finish the work we are in, to bind up the nation's wounds," etc. In his last public address he said, "He from whom all blessings flow must not be forgotten. A call for a national thanksgiving is being prepared."

How can the ability to observe this Constitution become a part of man's power? The answer is by coming into the spirit of His loving-kindness through appreciation of the goodness of God.

His name was called Jesus because He would save the people from their sins. That is, the name Jesus typified the spirit of Jesus, as when Jacob was called Israel because he prevailed with God; as Simon, the son of Jonas, was called Peter on account of his change in character. Abram's name was changed to Abraham, "For a father of many nations have I made thee."

Now, the Spirit of Jesus, revealing God's loving-kindness, as He went about doing good, when understood by men will change the spirit of men so that they will desire to function in that same spiritual atmosphere. He said:

"I, if I (my spirit) be lifted up (made prominent) will draw all men unto me."

If His loving-kindness be shown it will draw all men. (See illustration-story of Jim, under Altruism.)

The name, with the ancient people of Israel, as suggested before, was the mark of some outstanding char-

acteristic. As the man was called Adam because he was from the ground or earth, the woman was called Eve because she was the mother of all living. And down through Bible history you may find the name signifying either character or mark.

In the temple, Peter, in his sermon, said, "There is no other name under heaven given among men whereby we must be saved." He certainly meant there was no other spirit. The spirit of hate, jealousy, greed, lust, and every other spirit, except the spirit of loving-kindness fails.

If we honour God for His goodness we shall become more like Him in character or spirit, as Earnest in the story of Hawthorne's "Great Stone Face."

The spiritually minded everywhere can stand on this platform, "Thanksgiving and good-will"—"Goodness of God and altruism."

The Great Teacher gave a picture of the final judgment, and to those who had no mark or creed He said, "I was hungry and ye fed me; I was thirsty and ye gave me drink; I was naked and ye clothed me; I was sick and in prison and ye visited me." They wondered; then He said, "Inasmuch as ye did it unto one of these ye did it unto me." Jesus said, "Come unto me all ye that labour and are heavy laden and I will give you rest." He certainly meant, come into my spirit of loving-kindness—"Deal justly, love mercy and walk humbly before thy God." This is spiritual life wherever found.

Note the 19th Psalm—"The heavens declare the glory (goodness) of God; and the firmament showeth His handiwork," etc. Then it says, "The law (loving-kindness) of the Lord is perfect, converting the soul." The same law is manifest in the two trite and familiar lines

which follow (note the simplicity of the appeal, yet the universal law):

"What makes the lamb love Mary so, the eager children cry?
Oh, Mary loves the lamb you know, the teacher did reply."

The Psalmist says in the 107th Psalm, "Oh that men would praise the Lord for his goodness and for his wonderful works to the children of men." Then he repeats again and again, and in the last verse he says, "Whoso is wise and will observe these things even they shall know of the loving-kindness of God."

Is the psychology of this 107th Psalm scientifically sound? The writer thinks it will bear the scrutiny of scientific investigation, that the challenge of this Psalm can be met and worked out in personal experience, and that it will function in life in expressions of thanksgiving and good-will.

Admitting this, we have a spiritual law functioning through a natural law (law of psychology) which may be termed a spiritual law in the natural world, as a connecting link between God and man, producing the highest spiritual life.

This law was mentioned by St. Paul when he said, "Other foundation can no man lay than that which is laid" (loving-kindness, personified in Jesus). This law also functions through a natural law, in the plan of propagation as suggested by the Great Teacher when He said, "Ye must be born again." The spirit of loving-kindness under this plan vitalizes the spirit of man, giving life: as the egg is vitalized and fertilized by contact. The spirit of loving-kindness functions in life when we, having appreciated the goodness of God, are imbued with that same spirit and transmit it to others through altruistic service,—as when the Great Teacher said, "Let

your light shine before men that they may see your good works and glorify (love) your Father." "As God allows his light (sun) to shine that we may see his good works," and imbibe His spirit through appreciation of His goodness.

Altruistic service vitalizes the spirit of men everywhere, as seen in the spirit of men, women and children in southeastern Europe, Belgium and other countries, by the service rendered by one of our great and foremost citizens. His outstanding altruistic service has affected the children of those countries so that in their prayers morning and evening they lift their hearts in thanksgiving and gratitude for His kindness.

The result of altruistic service is seen in the friendly attitude of China to America as a result of the generous spirit manifested by our country in the negotiations growing out of the Boxer rebellion.

"The wind bloweth where it listeth and thou hearest the sound thereof, but canst not tell whence it cometh or whither it goeth. So is everyone who is born (vitalized) of the Spirit." He goes about doing good, vitalizing and pollenizing, as the wind vitalizes and pollenizes the blossoms of the trees and grain fields. Men are born again by this pollenizing process by receiving His loving-kindness, who in turn function in altruistic service. The parable of the leaven is apropos here.

"In the great struggle of Jean Valjean, before mentioned in the chapter under Mind, Victor Hugo says "there are two things in which I have not succeeded—in breaking the thread which holds me, fixed, riveted and sealed here by my heart (referring to conscience) or in silencing some one who speaks softly to me when alone" (lonely).

STORY OF HAWTHORNE'S GREAT STONE FACE

As the writer believes in the psychology or law of attraction depicted by Hawthorne in the "Great Stone Face," that it is as true as the law of gravitation and the law of reproduction, the story is given in brief that the law may be seen in its operation upon character.

The scenery is pictured as a lofty mountain, with a beautiful valley below. The foothills are lined here with huts or smaller houses, and there with larger and more pretentious dwellings, with a settlement of several thousand people in the valley.

The mountainside is steep and difficult. It seemed as if a great giant had sculptured out his own likeness on the precipice. There was the broad arched forehead a hundred feet in height; the nose with its long ridge, the vast lips which, if they could speak, would roll forth thunderous accents from one end of the valley to the other.

At close range it looked like a chaotic lot of gigantic rocks piled up. Retracing your steps, the wondrous features would again be seen, and the farther we withdraw the more like a human face with divinity intact would appear, until it grew dim in the distance with the clouds and glorified vapour of the mountains clustering around it. The Great Stone Face seemed positively alive.

"It was a happy lot of children to grow up to manhood and womanhood with the Great Stone Face before their eyes, for all the features were noble and the expression at once grand and sweet, as if it were the glow of the vast warm heart, that embraced all mankind in affection and had room for more."

It was an education only to look at it.

According to belief, the valley owed much of its fer-

tility to this benign aspect that was continuously beaming over it, illuminating the clouds, and with great tenderness.

“‘Mother,’ said Earnest, as the great face smiled upon him, ‘I wish it could speak, for it looks so very kindly that its voice must be pleasant.’

“When the toil of day was over, Earnest would gaze at the Great Stone Face for hours.

“There was a prophecy that a man would some day come to the village with a character and benign expression depicted in the Great Stone Face.

“Gathergold came and many thought he was the man, as he built a great palace, and was very rich, but Earnest soon learned that he was not the man.

“Then Old Blood and Thunder came with sword and flashing epaulets and embroidered collar. But he was not the man.

“Then Old Stony Phiz, the statesman, came but he was not the man.

“Then a poet came, and he was not the man.

“Finally the poet points out Earnest as the man. He had taken on the character of the Great Stone Face.”

XXVI

ALTRUISM

STORY: illustrating power of loving-kindness to change the spirit of man: and the teachings of altruism.

Cheeriest room that morn 'the kitchen,
Helped by Bridget's willing hands,
Bustled Hannah deftly making pies,
For ready waiting pans;

Little Flossie flitted 'round them
And her curling, floating hair
Glinted gold-like, gleamed and glistened
In the summer sunlit air.

Slouched a figure o'er the lawn,
A man so haggard and forlorn,
Tattered, grim, so like a beggar
N'er had trod that path before.

His hat was gone, his pants were torn,
Bare and begrimed his knees,
Face with blood and dirt disfigured,
Elbows peeped from out his sleeves;

Rat, tat, tat, upon the entrance
Brought Aunt Hannah to the door,
Parched lips humbly plead for water
As she scanned his misery o'er.

"Drink, you've had enough, you rascal;
Faugh, the smell now makes me sick;
Move, you thief, leave now these grounds,
Sir, or our dogs will help you quick."

Then the man with dragging footsteps,
Hopeless, wishing himself dead,
Crept away from sight of plenty,
Starved instead of being fed.

Wandered farther from the mansion
Till he reached a purling brook
Babbling, trilling, broken music
'Mid a quaint and shady nook.

Here sweet Flossie found him fainting,
In her hands were food and drink.
"Is it 'cause my auntie grieved you?"
Quickly did the wee one ask.

"I'll tell you a little verse then,
'Tis a Holy Bible task.
'Love your enemies, and those
Who despitefully use you,
Love them whether friend or foes."

Then the rags from off his forehead
She with dainty hands offstript,
In the brooklet's rippling water
Her own lace-trimmed 'kerchief dipped.

Wrung she then the linen cleanly,
Bandaged up the wound again,
Ere the still eyes opened slowly,
White lips murmuring, "Am I sane?"

"Look, poor man, here's food and drink.
Now thank our God before you take."
Then she flitted from his vision,
Left him prostrate on the ground
Conning o'er and o'er that lesson
With a grace to him new found.

That "Our God" unsealed a fountain
His whole life had never known,

When that human angel near him
Spoke of her God as his own.

Sunlight filtering through green branches
As they wind, wave, dance and dip,
Finds a prayer his mother taught him
Trembling on his crime-stained lip.

Hist, a step, an angry mutter,
And the owner of the place,
Gentle Flossie's haughty father,
And the tramp stood face to face.

"Thieving rascal, you've my daughter's
'Kerchief bound upon your brow,
Off with it, cast it down here,
Come, be quick about it now."

As the man did not obey him,
Flossie's father lashed his cheek
With a riding whip he carried,
Struck him hard and cut him deep.

Quick the tramp bore down upon him,
Felled him, o'er him where he lay,
Raised a knife to seek his life-blood,
Then there came a thought to stay.

All his angry, murderous impulse
Caused the knife to shuddering fall,
"He's her father, 'love your enemies,
'Tis our God reigns over all.'"

At midnight lambent, lurid flames,
Light up the sky with fiercest beams,
Wild cries, Fire! Fire! ring through the air
And red like blood each flame now seems.

They higher grow, they wilder throw weird,
Direful arms which ever lean
Against the gray stone mansion old.

Deep silence falls on all around,
At top-most window from the ground
Sweet Flossie stands, her curling hair
Encircled now by fire-lit air.

Loud rang the father's cry, "Oh God,
My child, my child! Will no one dare
For her sweet sake to climb the flaming stair?"

Look, one steps forth with muffled face,
On trembling ladder runs a race
With life and death, the window gains;
The ladder falls with crashing sound,
A flaming, treacherous mass—Oh God,
She was so young and he so brave,
Look once again, on highest roof he stands,
His arms encasp the child,
God help him yet to save.

"For life or for eternal sleep,"
He cried, then made a vaulting leap.
A tree branch catches with sure aim,
And by the act proclaims his name.

The air was rent, the cheers rang loud,
A rough voice cries from out the crowd,
"Huzza, my boys, well we know him,
None dares that leap but Flying Jim,"
A jail bird, outlaw, thief indeed,
Yet o'er them all takes kingly lead.

"Do now your worst," his gasping cry,
"Do now your worst, I'm doomed to die,
I've breathed the flame, 'twill not be long,"
Then hushed all murmurs through the throng.

With reverend hands they bore him where
The summer evening's cooling air
Came gently sighing through the trees,
The child's proud father on his knees

Forgiveness sought of God and Jim,
Which dying lips accorded him.

"I would her hands might touch my face,
Though she's so pure and I'm so base."
Low Flossie bent and kissed the brow,
With smile of bliss transfigured now.
Death, the Angel, sealed it there,
'Twas sent to God with mother's prayer.

(Author unknown.)

"OVER THE HILL FROM THE POOR-HOUSE"

I, who was always counted, they say,
Rather a bad stick anyway,
Splintered all over with dodges and tricks,
Known as the worst of the deacon's six;
I, the truant, saucy and bold,
The one black sheep in my father's fold,
Once on a time as the stories say,
Went over the hill on a winter's day,
Over the Hill from the Poor-house.

Tom could save what twenty could earn,
But giving was something he never would learn,
Isaac could half of the scripture speak,
Committed a hundred verses a week,
Never forgot and never slipped,
But honor thy father and mother he skipped,
As for Susan, her heart was kind
And good: what there was of it, mind,
Nothing too big and nothing too nice
And nothing she would not sacrifice
For one she loved, but that e'er one
Was herself, when all was said and done,
And Charley and Becky meant well, no doubt,
But any one could pull them about.

So all of our folks ranked well, you see,
Except one poor fellow, and that was me,
And when, one dark and rainy night,

A neighbor's horse went out of sight,
They hitched on me as the guilty chap
That carried one end of the halter strap,
But I think myself that view of the case
Wasn't altogether out of place.

But my mother denied it, as mothers do:
But I inclined to think it was true,
Though for me one thing might be said
That I as well as the horse was led.
For the worst of whiskey spurred me on
Or else the deed wouldn't never been done.
But the keenest grief I ever felt
Was when my mother beside me knelt,
And cried and prayed till I melted down
As I would not for half the horses in town,
I kissed her fondly then and there;
And swore henceforth to be honest and square.

I served my sentence, a bitter pill,
Some fellow should take who never will,
Then I decided to go out west,
Concludin' 'twould suit my health the best,
Where, how I prospered I never could tell
But fortune seemed to like me well,
And somehow every vein I struck
Was always bubbling over with luck,
And, better than that, I was steady and true,
And put my good resolution through.
And I wrote to a trusty old neighbour and said:
"You tell them, old fellow, that I am dead,
And died a Christian, 'twill please them more
Than if I had lived the same as before.

But when this neighbour, he wrote to me
"Your mother is in the poor house," said he,
I had a resurrection straightway
And started for her that very day,
And when I arrived where I was grown
I took good care that I shouldn't be known,

And I bought the old cottage through and through
Of some one Charley had sold it to.

And kept back neither work nor gold
To fix it up as it was of old;
The same big fireplace, wide and high,
Flung up its cinders towards the sky,
The old clock ticked on the corner shelf,
I wound it and set a goin' myself,
And if everything wasn't just the same
Neither I nor money was to blame,
Then Over the Hill to the Poor-house.

One blowin', blustering winter's day
With a team and cutter I started away,
My fiery nags were as black as coal,
They somewhat resembled the horse I stole,
I hitched, and entered the poor-house door;
A poor old woman was scrubbin' the floor.
She rose to her feet with great surprise,
And looked quite startled into my eyes;
I saw the whole of her trouble trace
In the lines that marred her dear old face.
"Mother!" I shouted, "your sorrows are done;
You are adopted at last by your horse-thief son,
Come 'Over the Hill from the Poor-house.'"

She didn't faint, but she knelt by my side
And thanked the Lord till I fairly cried.
And may be our ride wasn't pleasant and gay,
And may be she wasn't wrapped up that day.
And may be our cottage wasn't warm and bright,
And may be it wasn't a pleasant sight
To see her gettin' the evening tea
And frequently stoppin' and kissin' me,
And may be we didn't live happy for years
In spite of my brothers' and sisters' sneers;
Who have often said, as I have heard,
They wouldn't own a prison bird.

Though they are gettin' over that, I guess,
For all of them owe me more or less.

But I've learned one thing, and it cheers a man,
In always doin' the best he can,
That whether on the big book, a blot
Gets over a fellow's name or not,
Whenever he does a deed that is right
It's credited to him fair and bright,
And when you hear the great bugle's notes
And the Lord divides his sheep and goats;
However they may settle my case,
Wherever they may fix my place,
My good old Christian mother you'll see
Will be sure to stand right up for me,
With "Over the Hill from the Poor-house."

WILL CARLETON.

This passion, the love and consideration for one's fellows, is very strong in the normal man. Its play in the lives of men brings out the highest and best of all virtues. It begets courage, bravery, sacrifice, self-abnegation, honesty, justice and love. It would put down the brute force and exalt the beautiful, the true and the good. Its heart is lovely though rough and weather-beaten the exterior.

A beautiful example of this wonderful passion is seen in an incident which occurred at the Argonaut gold mine, California, 1922, when forty-seven miners were trapped and perished in the mines. One writer, describing the Herculean efforts of the workers to rescue their fellow-workmen, says:

"I have been down. I have mucked with a shovel in a hole that sends me reeling to the surface, sick, after six hours of work—and the men I worked with. Let it be written in the annals of pessimists and cynics that pure altruism still runs in an indelible vein through this

thing we call human nature. Through walls of gold they worked, thinking not of this precious man-sought metal, surrounding them on all sides, as they pick and sweat and dig, dig vengefully, into the very face of nature, 4,500 feet below the surface, not considering their lives dear unto themselves in the hope of rescuing their fellows."

A coat by honest labour torn
May wrap a heart as fine as steel,
And so may husks all weather worn
A perfect grain of wheat conceal.

WM. SCOTT.

"He only lasts but never lives,
Who much receives and nothing gives."

An incident of college days illustrating the subject of this book:

In a certain classroom there was a large picture on the wall back of the professor's chair. The students passed the picture every day without paying much attention to it—some scarcely noticing it.

One day the professor took the class into an adjoining room and closed the door. He then mentioned the picture on the wall, and asked each member of the class what he had seen in the picture. Some had noticed it but could not mention any special features. Others had given some little attention to it but could not describe it.

The professor then took the class into the room to take a look at the picture. When all were seated he pointed out the beautiful features, the fine shadings, the purpose of the artist, together with the beautiful background, all of which brought out a very wonderful picture and a valuable work of art.

After that occasion the picture was never the same as before to the class. The wonderful picture had transformed the character and attitude of the class from indifference to admiration, not only for the picture, but for the artist, the creator of the picture.

Many people are to-day living in only two or three rooms of a wonderful mansion. They have not even peered into the other rooms with beauties and harmonies beyond imagination.

So we can put in a few words the fundamental law of right relations or righteousness on which all men can agree.

We can unhesitatingly say, they are:

Love and reverence for our Great Creator in recognition of the goodness and wisdom of God, and

Altruism or sympathetic service to all men, showing courtesy, kindness and good-will.

As suggested in the Foreword and now emphasized, it is the hope of the author that other writers may prepare books suitable to the various grades of our schools and develop this line of thought with more elaborate and scientific detail, so that this fundamental spirit of right relations may permeate the lives of all citizens without regard to sect, ism or creed.

CONCLUSION

5. Let the people praise thee, O God, let all the people praise thee,

6. Then shall the earth yield her increase, and God, even our God, shall bless us.

7. God shall bless us; and all the ends of the earth shall fear him. (Psalm LXVII.)

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3. Let the righteous be glad: let them rejoice before God, yea let them exceedingly rejoice. (Psalm LXVIII.)

4. All the earth shall worship and shall sing unto thee; they shall sing to thy name (loving-kindness). (Psalm LXVI.)

1. O give thanks unto the Lord; for he is good; for his mercy endureth forever. (Psalm CXXXVI.)

1. Praise ye the Lord from the heavens, praise him in the heights.

2. Praise ye him, all his angels: praise ye him all his hosts.

3. Praise ye him, sun and moon: Praise him all ye stars of light.

4. Praise him, ye heavens of heavens, and ye waters that be above the heavens.

7. Praise the Lord from the earth.

8. Fire and hail; snow, and vapour; stormy wind fulfilling his word.

9. Mountains, and all hills; fruitful trees, and all cedars.

10. Beasts, and all cattle; creeping things, and flying fowl.

12. Both young men, and maidens, old men and children.

13. Let them praise the name (loving-kindness) of the Lord, for his name is excellent, his glory is above the earth and heaven. (Psalm CXLVIII.)

1. Praise ye the Lord. Sing unto the Lord a new song, and praise him in the congregation of the saints.

2. Praise him for his mighty acts, praise him according to his excellent greatness.

3. Praise him with the sound of the trumpet; praise him with the psaltery and harp.

5. Praise him upon the loud cymbals, praise him upon the high-sounding cymbals.

6. "Let every thing that hath breath praise the Lord. Praise ye the Lord." (Psalm CL.)

PROGRESS

In Education's plan and maze
For service to abound;
We've trodden paths of intellect
By "THREE Rs" old and sound.

But in our larger vision now,
"THE FOURTH 'R'" comes to view,
In Righteousness, at last we know
His Goodness, Wisdom true.

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Education - Curricula

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